CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS.
New York, March 14, 1907.

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.) and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close.	Work.	Place.	On file.	See issue
Mar.				
•15	Dam	Great Falls, Mont	P., S. & B. S.	2- 7
18	Sewers	Burlington, Iowa	P., S. & B. S.	1-10
•20	Sewer	White Plains, N. Y	P., S. & B. S.	2-28
23	Officers' quarters	Charleston, S.C	S	2-21
30	Capstans	Norfolk, Va	S	2-21
30	Capstans	Charleston, S. C	S	2-21
•30	Water tank & tower	Wash., D.C	S	2-28
30	Generating set	Portsmouth, N. H	S	3- 7
30	Quay walls	Charleston, S. C	S	3-14
Apr				
•3	Canal, etc.	Great Falls, Mont	P., S. & B. S.	2-14

•Work advertised in Engineering News.

LIST OF CONTRACTS PENDING.

LIGHT, HEAT AND POWER PLANTS.

Bids close. Work. Place. On file. See issue

At once. Power plant, Breckenridge, Colo........Mar. 14
Mar. 18. Electric equipment, New York, N. Y....Mar. 7
Mar. 18. Heating, New York, N. Y..............Mar. 7
Mar. 20. Lighting plant, Snyder, Okla...........Mar. 7
Mar. 30. Generating set, Portsmouth, N. H.......Mar. 7
Apr. 1. Power plant, Winnipeg, Man.............Mar. 14
Apr. 4. Conduit system, Macon, Ga..............Mar. 14
Advertised, Eng. News, Mar. 14 and 21.
Apr. 8. Lighting system, Clifton Forge, Va......Mar. 14
Apr. 15. Power plant, Bowling Green, Ky........Mar. 7
May 1. Lighting, Natchez, Miss...............Mar. 7
Advertised, Eng. News, Mar. 7 and 14.

BRIDGES.

Mar. 14. Alterations, etc., New York, N. Y......Mar. 7
Mar. 16. Pier and abutments, Dayton, Ohio.......Mar. 7
Mar. 16. Bridge and culvert, Cleveland, Ohio....Mar. 7
Mar. 16. Bridges, Orange, Mass..................Mar. 14
Mar. 16. Removing bridge, Pittsburg, Pa..........Mar. 14
Mar. 18. Bridge, Millheim, Pa....................Mar. 7
Mar. 18. Aqueduct, New York, N. Y..............Feb. 21
Advertised, Eng. News, Feb. 21 to Mar. 7.
Mar. 18. Superstructure, Chillicothe, Ohio ....Feb. 28
Mar. 18. Bridges, Chillicothe, Ohio ....Feb. 28
Mar. 18. Bridge, Thawville, Ill....................Mar. 14
Mar. 18. Bridge, Porterville, Cal. ....Mar. 14
Mar. 19. Superstructure, Shellmouth, Man.........Feb. 28
Mar. 20. Bridge, Yorkville, S. C..................Feb. 28
Mar. 20. Bridges, Dauphin, Man..................Feb. 28
Mar. 21. Bridge, Jarratt, Va.....................Mar. 14
Mar. 21. Substructure, Crooksville, Ohio..........Mar. 14
Mar. 23. Bridges, Chandler, Okla.................Mar. 14
Mar. 25. Superstructure, Zanesville, Ohio........Mar. 14
Mar. 26. Bridge, Indianapolis, Ind................Mar. 14
Mar. 27. Bridge, etc., Paterson, N. J.............Mar. 14
Advertised, Eng. News, Mar. 14 and 21.
Mar. 28. Bridge, Reading, Pa.....................Mar. 14
Advertised, Eng. News, Mar. 14.
Mar. 28. Substructure, etc., Toledo, Ohio.........Mar. 14
Apr. 1. Bridges, Salinas, Cal....................Feb. 21
Apr. 1. Bridge, Greenwood, Miss................Jan. 31
Apr. 2. Bridges, etc., Crawfordsville, Ind.......Mar. 14
Apr. 8. Trestles, etc., Louisville, Ky............Mar. 14
Advertised, Eng. News, Mar. 14 to Apr. 4.
Apr. 25. Bridges, Glendive, Mont. ....Mar. 14
Advertised, Eng. News, Mar. 14 to Apr. 4.
Apr. 29. Viaduct, New Orleans, La..............Feb. 28
Advertised, Eng. News, Feb. 28 to Apr. 11.

BUILDINGS.

At once. Y. M. C. A. building, Baltimore, Md..Mar. 14
Mar. 14. Post-office, etc., Spokane, Wash.......Feb. 7
Mar. 15. Railway shops, Calgary, Alta...........Mar. 7
Mar. 16. Pipe, etc., Washington, D. C..........Feb. 28
Advertised, Eng. News, Feb. 28 and Mar. 7.
Mar. 18. Sanitary work, etc., New York, N. Y....Mar. 7
Mar. 20. Post-office, Atlantic City, N. J.........Mar. 7
Mar. 21. Post-office, Owosso, Mich................Feb. 21
Advertised, Eng. News, Feb. 21 and 28.
Mar. 21. City hall, Louisville, Ky...............Mar. 14
Mar. 21. Shelter house, New York, N. Y.........Mar. 14
Mar. 23. Officers' quarters, Charleston, S. C.....Feb. 21
Mar. 23. Post-office, Green Bay, Wis.............Feb. 21
Advertised, Eng. News, Feb. 21 and 28.
Mar. 28. Elephant house, New York, N. Y.........Mar. 14
Apr. 9. Court-house, Carthage, Ill..............Feb. 28
Apr. 3. Plumbing fixtures, Washington, D. C...Feb. 14
Advertised, Eng. News, Feb. 14 to Mar. 7.
Apr. 3. Library, University, N. Dak.............Mar. 7
Apr. 4. Filing cases, etc., New York, N. Y.....Mar. 14
Advertised, Eng. News, Mar. 14 and 21.
Apr. 8. Post-office, Denver, Colo...............Mar. 7
Apr. 9. Post-office, Little Falls, N. Y..........Mar. 7
Advertised, Eng. News, Mar. 7 and 14.
Apr. 11. Interior finish, New York, N. Y........Mar. 14
Apr. 12. Repairs, Washington, D. C..............Mar. 14
Apr. 13. Buildings, Fort Hancock, N. J..........Mar. 14
Advertised, Eng. News, Mar. 14 to Apr. 4.
Apr. 15. Post-office, Tyler, Tex................Mar. 7
Advertised, Eng. News, Mar. 7 and 14.
May 1. Plans, Milwaukee, Wis..................Feb. 28
May 1. Buildings, North Chicago, Ill...........Mar. 14
June 4. State Capitol, Pierre, S. Dak............Mar. 7

WATER SUPPLY AND IRRIGATION.

Mar. 15. Water-works and sewers, Lumberton, N. C..........Mar. 7
Advertised, Eng. News, Mar. 7 and 14.
Mar. 15. Water-works, Gate City, Iowa ....Mar. 7
Mar. 15. Hydrants, St. Boniface, Man............Feb. 21
Mar. 15. Dam, Great Falls, Mont.................Feb. 7
Advertised, Eng. News, Feb. 7 to Mar 7.
Mar. 15. High duty pumps, Fort Worth, Tex....Feb. 28
Advertised, Eng. News, Feb. 28 to Mar. 14.
Mar. 16. Water-works, etc., Ft. Barry, Cal.......Mar. 7
Mar. 16. Water-works, New Liskeard, Ont.......Mar. 14
Mar. 18. Mains, Port Arthur, Tex...............Mar. 14
Mar. 18. Water tank, Fall River, Mass..........Mar. 7
Mar. 18. Water-works, Franklin, Mo............Mar. 7
Mar. 18. Water-works & Sewers, South McAlester, Ind. T. ....Feb. 28
Mar. 19. Pumping plant, California City Point, Cal. Feb. 14
Mar. 20. Water-works, etc., Saskatoon, Alta......Feb. 21
Mar. 20. Engine and boilers, Sioux City, Iowa.....Mar. 7
Mar. 20. Water-works, sewer outfall, etc., Snyder, Okla. ....Mar. 7
Mar. 20. Ditches, etc., Peru, Neb...............Mar. 14
Mar. 21. Ditches, Forest City, Iowa.............Mar. 14
Mar. 21. Well clusters and c.-i. pipe, Ironton, Ohio. Mar. 7
Mar. 22. Cisterns, Ellis, Ohio ....Mar. 7
Mar. 22. Cast-iron pipe, etc., Alma Center, Wis..Feb. 28
Mar. 22. Tank, engine, etc., Alma Center, Wis...Feb. 28
Mar. 23. Water tank and tower, Frontenac, Kan..Mar. 7
Mar. 25. Lead pipe, St. Paul, Minn...............Mar. 7
Mar. 29. Ditch, Greenfield, Ind..................Mar. 14
Mar. 29. Water-works, Alma Center, Wis.........Mar. 14
Advertised, Eng. News, Mar. 14.
Mar. 30. Water tank and tower, Washington, D. C. Feb. 21
Advertised, Eng. News, Feb. 21 and 28.
Apr. 2. Mains, Crowley, La......................Feb. 28
Apr. 3. Canals, etc., Great Falls, Mont..........Feb. 14
Advertised, Eng. News, Feb. 14 to Mar. 21.
Apr. 3. Ditches, Parker, S. Dak.................Feb. 21
Apr. 4. Ditches, etc., Emmetsburg, Iowa.......Mar. 7
Apr. 4. Filtration plant, Yonkers, N. Y.........Mar. 14
Advertised, Eng. News, Mar. 14.
Apr. 4. Ditch and laterals, Albert Lea, Minn.....Mar. 14
Advertised, Eng. News, Mar. 14 and 21.
Apr. 10. Cast-iron pipe, etc., Atlanta, Ga........Mar. 14
Advertised, Eng. News, Mar. 14 and 21.
Apr. 10. Canal, Belle Fourche, S. Dak..........Feb. 21
Advertised, Eng. News, Feb. 21 and 28.
Apr. 15. Canal, Portland, Ore...................Feb. 21
Advertised, Eng. News, Feb. 21 to Mar. 14.
Apr. 15. Water-works, Billings, Mont............Mar. 7
Apr. 16. Water-works, McKeesport, Pa............Mar. 14
Advertised, Eng. News, Mar. 14.
Apr. 17. Structures, Huntley, Mont..............Feb. 28
Advertised, Eng. News, Feb. 28 to Mar. 21.

SEWERAGE.

Mar. 14. Sewer, St. Bernard, Ohio ....Feb. 21
Mar. 14. Sewers, Painesville, Ohio ....Mar. 7
Mar. 14. Sewers, New York, N. Y................Mar. 7
Mar. 18. Sewer, Willoughby, Ohio ....Mar. 7
Mar. 18. Sewers, Burlington, Iowa................Dec. 27
Advertised. Eng. News, Dec. 27.
Mar. 18. Sewer, Jersey City, N. J................Mar. 14
Mar. 18. Pipe, etc., New Haven, Conn............Mar. 14
Mar. 18. Sewers, Albany, N. Y...................Mar. 14
Mar. 18. Sewer, Weehawken, N. J................Mar. 14
Mar. 19. Sewers, Mooresville, Ind...............Mar. 14
Mar. 19. Sewer, South Bend, Ind................Mar. 14
Mar. 19. Pumping engines, Summit, N. J........Feb. 28
Advertised, Eng. News, Feb. 28 to Mar. 14.
Mar. 19. Sewers, etc., Philadelphia, Pa.........Mar. 7
Advertised, Eng. News, Mar. 7 and 14.
Mar. 20. Sewers, Lancaster, Ohio ....Mar. 7
Mar. 20. Sewers, Vinton, Iowa ....Mar. 7
Mar. 20. Pipe sewer, Pittsburg, Kan.............Feb. 28
Mar. 20. Sewers, White Plains, N. Y.............Feb. 21
Advertised, Eng. News, Feb. 21 to Mar. 14.
Mar. 21. Sewers, Polo, Ill.......................Mar. 7
Mar. 23. Sewers, Evansville, Ind................Mar. 14
Mar. 25. Boilers and Chimney, Orange, N. J....Mar. 7
Advertised, Eng. News, Mar. 7 and 14.
Mar. 25. Pumping main and ejectors, Orange, N. J. Mar. 7
Advertised, Eng. News, Mar. 7 and 14.
Mar. 26. Sewer pipe, hydrants, etc., Melrose, Mass. Mar. 14
Advertised, Eng. News, Mar. 14.
Apr. 1. Sewer mains, Westerleigh (S. I.), N. Y. Mar. 14
Advertised, Eng. News, Mar. 14.
Apr. 2. Sewage disposal works, Waterbury, Conn. Mar. 7
Advertised, Eng. News, Mar. 7 and 14.
Apr. 2. Sewer, Crowley, La.....................Feb. 21
Apr. 4. Septic tank, Ithaca, N. Y...............Mar. 14
Advertised, Eng. News, Mar. 14 and 21.
Apr. 5. Tunnel, Boston, Mass...................Mar. 14
Advertised, Eng. News, Mar. 14.
Apr. 5. Trenches, Boston, Mass.................Mar. 7
Advertised, Eng. News, Mar. 7.
Apr. 10. Interceptors, etc., Baltimore, Md.......Mar. 7
Advertised, Eng. News, Mar. 7 and 14.
Apr. 11. Sewer, Parkersburg, W. Va............Mar. 14
Advertised, Eng. News, Mar. 14 and 21.

STREETS AND ROADS.

Mar. 14. Paving, Watertown, N. Y..............Feb. 28
Advertised, Eng. News, Feb. 28.
Mar. 14. Sod, New York, N. Y...................Feb. 28
Mar. 14. Paving, etc., Painesville, Ohio ....Mar. 7
Mar. 15. Road, Harrisburg, Pa...................Feb. 28
Mar. 15. Improving grounds, Salem, Ore..........Feb. 14
Mar. 15. Macadam, Owensboro, Ky..............Mar. 14
Mar. 16. Paving, Omaha, Neb....................Feb. 21
Mar. 16. Improving battlefield, Washington, D. C..Feb. 28
Mar. 16. Road work, Waterloo, Iowa ....Feb. 28
Mar. 18. Paving, Columbus, Ind..................Feb. 28
Mar. 18. Highway, New Philadelphia, Ohio ....Feb. 28
Mar. 18. Paving, etc., Port Chester, N. Y........Feb. 28
Advertised, Eng. News, Feb. 28 and Mar. 7.
Mar. 18. Sidewalks, South Orange, N. J.........Mar. 14
Mar. 18. Steam roller, Hartford, Conn...........Mar. 14
Mar. 18. Paving, etc., Albany, N. Y.............Mar. 14
Mar. 18. Paving, Lansing, Mich..................Mar. 14
Mar. 18. Grading, etc., Hancock, Mich...........Mar. 14
Mar. 18. Paving, etc., Olathe, Kan..............Mar. 14
Mar. 19. Paving, South Bend, Ind...............Mar. 14
Mar. 19. Cement sidewalks, Bessemer, Ala.......Mar. 7
Mar. 19. Paving, etc., New York, N. Y..........Mar. 7
Mar. 20. Repaving, etc., Brooklyn, N. Y.........Mar. 7
Mar. 20. Grading, etc., Philadelphia, Pa..........Mar. 7
Advertised, Eng. News, Mar. 7.
Mar. 20. Paving, etc., Aurora, Ill................Mar. 14
Advertised, Eng. News, Mar. 14.
Mar. 22. Sidewalks, Louisville, Ky...............Mar. 14
Mar. 22. Grading, etc., St. Louis, Mo............Mar. 14
Mar. 23. Repairing pavements, Washington, D. C. Mar. 7
Advertised, Eng. News, Mar. 7 and 14.
Mar. 23. Gravel road, Terre Haute, Ind..........Mar. 7
Mar. 25. Paving, etc., Mamaroneck, N. Y........Mar. 7
Advertised, Eng. News, Mar. 7 to 21.
Mar. 25. Paving, Omaha, Neb....................Mar. 14
Mar. 25. Paving, etc., Titusville, Pa.............Mar. 14
Advertised, Eng. News, Mar. 14 and 21.
Mar. 26. Grading, etc., New York, N. Y.........Mar. 14
Mar. 26. Roads, Pittsburg, Pa...................Mar. 14
Mar. 26. Paving, etc., Dunkirk, N. Y............Mar. 14
Advertised, Eng. News, Mar. 14 and 21.
Mar. 27. Grading, etc., New York, N. Y..........Mar. 14
Mar. 27. Grading, etc., Hoboken, N. J...........Mar. 14
Mar. 28. Soil, New York, N. Y...................Mar. 14
Mar. 28. Gravel, New York, N. Y................Mar. 14
Mar. 30. Grading, etc., Cleveland, Ohio ....Mar. 14
Mar. 30. Paving, Washington, D. C..............Mar. 7
Advertised, Eng. News, Mar. 7 and 14.
Apr. 1. Paving, etc., Port Chester, N. Y........Mar. 14
Advertised, Eng. News, Mar. 14 and 21.
Apr. 1. Grading, etc., St. Paul, Minn...........Mar. 14
Apr. 2. Roads, Covington, Ind..................Mar. 14
Apr. 3. Grading, etc., Ottawa, Kan.............Mar. 14
Apr. 3. Driveway, etc., Chicago, Ill............Mar. 7

MISCELLANEOUS CONTRACTS.

Mar. 14. Incinerator, New York, N. Y............Feb. 28
Mar. 15. Wharf, breakwater, Moncton, N. B.....Mar. 7
Mar. 16. Sea-wall, etc., Philadelphia, Pa..........Feb. 28
Advertised, Eng. News, Feb. 28 and Mar. 7.
Mar. 18. Lock-gate machinery, Boston, Mass......Feb. 21
Advertised, Eng. News, Feb. 21 and 28.
Mar. 18. Removing bedrock, Detroit, Mich.......Feb. 21
Advertised, Eng. News, Feb. 21 to Mar. 14.
Mar. 18. Steam shovels, Panama ....Mar. 14
Mar. 18. Engineering supplies, Panama ....Mar. 14
Mar. 19. Naval supplies, Washington, D. C........Mar. 14
Mar. 20. Ordnance, Washington, D. C............Mar. 14
Mar. 20. Excavation, Boston, Mass...............Feb. 21
Advertised, Eng. News, Feb. 21 to Mar. 14.
Mar. 20. Pontoons, Cincinnati, Ohio ....Feb. 21
Advertised, Eng. News, Feb. 21 to Mar. 14.
Mar. 20. Dredging, Grand Rapids, Mich..........Feb. 28
Mar. 21. Bulkhead, New York, N. Y............Mar. 7
Mar. 22. Dredging, Chicago, Ill..................Feb. 21
Advertised, Eng. News, Feb. 21 to Mar. 14.
Mar. 22. Steel wall lockers, West Point, N. Y....Feb. 21
Advertised, Eng. News, Feb. 21 to Mar. 14.
Mar. 22. Lock and dam, etc., Cincinnati, Ohio.....Feb. 21
Advertised, Eng. News, Feb. 21 to Mar. 14.
Mar. 22. Sprinkler, etc., St. Boniface, Man........Mar. 14
Mar. 25. Dredging, Jacksonville, Fla.............Feb. 28
Advertised, Eng. News, Feb. 28 to Mar. 21.
Mar. 25. Telephone cable, Western Australia (Foreign) ....Feb. 28
Mar. 26. Engineering supplies, Panama ....Mar. 14
Mar. 27. Dredging, New Orleans, La.............Jan. 24
Advertised, Eng. News, Jan. 24 and 31.
Mar. 28. Canal, Boston, Mass...................Feb. 14
Advertised, Eng. News, Feb. 14 to 28.
Mar. 28. Greenhouse, New York, N. Y............Mar. 14
Mar. 30. Dredging, Washington, D. C............Mar. 14
Mar. 30. Quay walls, Charleston, S. C............Mar. 14
Mar. 30. Capstans, Charleston, S. C..............Feb. 21
Mar. 30. Capstans, Norfolk, Va..................Feb. 21
Mar. 30. Timber land, Scranton, Miss............Feb. 28
Advertised, Eng. News, Feb. 28 to Mar. 21.
Mar. 30. Dredging plant, Cincinnati, Ohio........Mar. 7
Advertised, Eng. News, Mar. 7 to Mar. 28.
Apr. 2. Reclamation work, British India (Foreign). Jan. 17
Apr. 3. Cement, Wheeling, W. Va..............Mar. 7
Advertised, Eng. News, Mar. 7 to Mar. 28.
Apr. 4. Repairing pier, Grand Rapids, Mich....Mar. 7
Advertised, Eng. News, Mar. 7 to Mar. 28.
Apr. 5. Drain, Algona, Iowa ....Feb. 28
Apr. 5. Crib and riprap, Cincinnati, Ohio ....Mar. 14
Advertised, Eng. News, Mar. 14 to 28.
Apr. 11. Cement, Brandon, Man..................Feb. 14
Advertised, Eng. News, Feb. 14 to Mar. 7.
Apr. 12. Ditches, Brookings, S. Dak.............Oct. 13
May 2. Dredging, Des Moines, Iowa ....Mar. 14
July 1. Tunnel, New Zealand (Foreign)........Sept. 13
Advertised, Eng. News, Sept. 13 to Mar. 14.

CIVIL SERVICE EXAMINATIONS.

Mar. 16. Asst. Inspector of Gas, Albany, N. Y....Feb. 21
Mar. 20. Draftsman and Surveyor, Hawaii.........Feb. 28
Mar. 20. Forest Supervisor, Alaska ....Feb. 28
Mar. 20. Scientific Asst., Veterinary Zoology, Washington, D. C.....................Mar. 14
Mar. 20. Triangulation Aids, Washington, D. C...Mar. 14
Mar. 27. Inspector Textile Fabrics, Wash., D. C...Mar. 14
Mar. 27. Elec. Engr. & Draftsman, Wash., D. C..Mar. 14
Apr. 2. Structural Steel Dftsman, New York, N.Y. Mar. 14
Apr. 3. C. E. Students, Washington, D. C.......Mar. 14
Apr. 4. Assistant Engr., New York, N. Y........Mar. 14
Advertised, Eng. News, Mar. 14 to 28.

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

APPOMATTOX & CHARLOTTE.—B. P. Eggleston, Pres., Charlotte Court-House, Va., informs us that survey is partly completed for this line, which is to extend from Drakes Branch, Va., to West Appomattox, 40 miles. Negotiations are being made for necessary capital. Right-of-way is partly secured. Company is not ready to let contracts for construction.

ARIZONA.—The Shannon Copper Co. will build a 10-mile railroad connecting the company's smelter at Clifton, Ariz., with the mines at Metcalf. Estimated cost, $350,000. J. W. Hazen is Secy. and Treas., 52 Broadway, New York City.

ATCHISON, TOPEKA & SANTA FE.—Company has secured land at Cleburne, Tex., for extending its yards.

ATLANTA, STONE MOUNTAIN & LITHONIA.—Incorporated in Georgia to build a railroad from Decatur to Stone Mountain and thence to Lithonia, with branches, a total distance of 30 miles. Capital stock, $50,000. It will be an up-to-date freight line. The incorporators are A. O. Venable, A. B. Kellogg, R. M. Thompson, L. F. McClelland, J. S. McCurdy, D. Shepard and G. R. Pace, of Decatur; S. H. Venable, J. L. Patrick, T. C. Miller, J. N. Ellis, Judge B. H. Hill and Chas. D. Hill, of Atlanta. It is expected that work on the new line will begin immediately and within the next few months will be completed.

ATLANTIC, QUEBEC & WESTERN RY.—This company, which has built 22 miles of line from New Carlisle to Port Daniel, Que., has applied to the Quebec Legislature to enable it to issue bonds to the amount of $50,000,000, to complete the line to Gaspe, Que. Also, to either buy the Atlantic & Lake Superior Ry., running from Metapedia to New Carlisle, or build a line of railway from those points to connect with the line.

BOSTON & MAINE.—We are officially advised that double-tracking of line at several points is being considered and that surveys are being made. Nothing definite can be announced at present. H. Bissell is Ch. Engr., Boston. Noted on Jan. 17.

BENNETTSVILLE & CHERAW. — This company is reported to have been purchased in the interest of the Scott Lumber Co. The new officers are: J. A. Heckart, Pres., Bennettsville, S. C.; H. A. Page, Gen. Mgr.; George Burchill, of Sumter, S. C., Secy. and Treas. An extension of about 25 miles is to be built and the present road is to be repaired. Directors are W. A. Marr, Ashland, Pa.; F. P. Spies, Tamaqua, Pa.; H. S. Albright, Orwigsburg, Pa.; Alex. Scott, Franckville, Pa.; R. A. Wagner, Reading, Pa.; J. R. Page, Biscoe, N. C., and the officers. H. A. Page is Pres. of the Aberdeen & Asheboro Railroad at Aberdeen, N. C.

CHANDLER & SHAWNEE.—This company has been chartered in Oklahoma, with headquarters at Chandler, to build from that city south through Lincoln County into Pottawatomie County to Shawnee. Estimated length, 30 miles. The incorporators are W. R. Gulick, Frank S. Dimon, J. F. Collar, George B. Rittenhouse, M. D. Owen, F. B. Hoyt, H. B. Gilstrap, Wm. Schlegel and H. G. Etettmun, all of Chandler.

COLORADO, COLUMBUS & MEXICAN.—A. O. Bailey, Pres., Columbus, N. Mex., advises us that this company is now negotiating for capital for building its line. Surveys are not yet made. Right-of-way is partly obtained. The railway will extend from Columbus, N. Mex., to Salt Lake City, Utah, 1,000 miles. Work will be heavy construction.

DELAWARE & HUDSON.—The Scranton "Truth" states that this company will spend about $8,000,000 for improving its line during the next five years. These improvements will include "the four-tracking of the Pennsylvania division between Carbondale and Wilkes-Barre, Pa., the greater part of which, between Scranton and Carbondale, is well under way, and will be completed in June next. The double-tracking of the division between Lanesboro and Nineveh, N. Y., the former point of which is where the Delaware & Hudson leaves the Jefferson division of the Erie. The construction of a double-track between South Wilkes-Barre and Pittston, which, when the four tracks between Scranton and Wilkes-Barre are completed, will give the road six tracks between these points. The electrification of the division between Scranton and Wilkes-Barre; that is, two tracks, for it is apprehended that this will be the only solution of the problem that has been given over to the General Electric Co. The building of new stations at several points between Wilkes-Barre and Carbondale, which will fully meet the needs of the several communities." Noted on Jan. 24.

GARDEN CITY, GULF & NORTHERN.—We are officially informed that this company will let contracts soon for constructing its line in Kansas. D. R. Menke is Pres. and S. V. Wardall is Ch. Engr., both at Garden City, Kan. Surveys are under way.

IONE & EASTERN.—H. E. C. Fensler, Ch. Engr., 811 Turk St., San Francisco, Cal., states that surveys have been made for an extension from Martell, Cal., eastward, 23 miles.

LAWTON, WICHITA FALLS & NORTHWESTERN.—J. M. Bellamy, Pres., Lawton, Okla., advises us that contracts will be let by this company about May 1 for building its proposed line between Lawton, Okla., and Wichita Falls, Tex., 36 miles. Surveys have been made and right-of-way and capital secured. Warren Dunbar is Ch. Engr., at Lawton.

MIDDLETOWN & CECILTON.—This road is under construction from Middletown, Del., via Warwick and Cecilton, Md., to Georgetown, Md., twelve miles, and about seven miles are reported graded. A branch seven miles long may be constructed from Cecilton to Bay View, Md. W. R. Polk, Middletown, Del., is Gen. Mgr.

NEBRASKA, KANSAS & SOUTHWESTERN.—We are officially advised that construction contract will be let in about 90 days for building its proposed railroad from Superior, Neb., to Dalhart, Tex., 500 miles, passing through Stockton, Ransom and Ness City, Kan. The line is under survey from Stockton to Ness City, Kan., 90 miles, and it is expected to begin construction about July 1. J. C. Hopper is Pres., Ness City, Kan. B. L. Brown is Ch. Engr., Laclede Bldg., St. Louis, Mo. F. T. Burnham is Secy., Beloit, Kan. Incorporation noted on Feb. 14.

NORTHERN RY. OF MAINE.—A bill has been introduced in the Maine Legislature to grant this company a charter for a railway from a point on the Bangor & Aroostook near Fort Kent, Me., west to the plantation of St. John and the St. Francis River, and from Fort Kent east, via Frenchville, Madawaska and Grand Isle to Van Buren. Capital stock, $500,000. Incorporators: Arthur H. Lewis, of Chicago; Edson E. Goodrich, of Waterville, Me.; V. M. Therriault, of Fort Kent.; Patrick Therriault, of Grand Isle, and E. R. Michaud, of Frenchville.

OREGON EASTERN.—A Portland press report states that "final locations for the Oregon Eastern, the Southern Pacific branch across Central Oregon, from Natron to Ontario, have just been completed. The route selected is thoroughly practical, with easy gradients. Across Central Oregon it is 450 miles long. It is expected that construction will be begun within the next 90 days. The line, as finally located, runs up the middle fork of the Willamette River to Salt Creek and up that stream, through the Cascades by Odell Pass, past the town of Odell, through Christmas Lake Valley, where there are 250,000 acres of agricultural land waiting to be opened up, south of Wagon Tire Mountain, through the center of Harney Valley, where there are 200,000 acres more of good land awaiting the settler's plow, thence down the Malheur River to Ontario. The work of locating the lines has required 15 months."

PAULS VALLEY.—See Seaboard Northern R. R.

QUEBEC & LAKE ST. JOHN.—The Canadian Northern R. R. Co. has acquired this line and will build a branch this summer from Roberval, 160 miles north of Quebec, to James Bay.

SEABOARD NORTHERN.—The Pauls Valley R. R. Co., which was incorporated a few years ago to build from Ada, Ind. T., via Pauls Valley and Waurika, Ind. T., to Wichita Falls, Tex., 180 miles, has filed notice of change of name to the Seaboard Northern Railroad. Capital is $5,000,000. The original incorporators are J. C. Amendt, Chicago; W. M. Freeman, Albert Rennie, J. B. Thompson, S. J. Garvin and J. C. Hybarger, Pauls Valley; A. P. Williams, John Upshaw and J. P. Stovall, Wanette.

SEBASTICOOK & MOOSEHEAD.—A bill has been introduced in the Maine Legislature to authorize this company to build an extension from Harmony to a connection with the Canadian Pacific at or near Onawa Lake, about 35 miles, passing through Cambridge, Wellington, Parkman, Kingsbury, Abbott, Guilford, Willimantic and Ellicott Plantation; also an extension from Pittsfield to a connection with the Wiscassett & Quebec in the town of Albion, about 18 miles. A. B. Thompson is Gen. Mgr., at Pittsfield, Me.

TEXAS.—The State Penitentiary Board has applied to the Legislature for authority to build six miles of extension of the State Railroad from Rusk, Tex., to connect with the Texas & New Orleans R. R. near Gallatin, Tex. Benton McMillan is Financial Agent of the Penitentiary Board.

WEST SIDE TERMINAL.—Incorporated in Missouri to build a belt railway 60 miles long around the city of St. Louis, from a point on the west side of the Mississippi River, about three miles below the mouth of the Missouri, around the western limits of the city to a point near Jefferson Barracks. Another line from the starting point is to run through the city of St. Louis and terminate near Jefferson Barracks. Capital stock, $1,000,000. Incorporators: F. W. Roenike, Collins F. Newton, Ira D. Neff, William A. Lamping and William H. Miller, all of St. Louis.

ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

SPRINGFIELD, MASS.—The Springfield St. Ry. Co. will make extensive improvements in its system this year. H. C. Page, Gen. Mgr., has announced that the company is making plans to spend at least $150,000 in new feed wires and in the installation of a new telephone system on every line in the city. New feed wires will be installed on the Chicopee, Chicopee Falls, Indian Orchard and Belmont Ave. lines, which are expected to cost about $125,000, while the 50 or more telephones which will be put in along the different lines wil cost upward of $25,000. Bids are now being considered for the installation of the telephone system.

NORWICH, CONN.—We are officially advised that the Norwich, Colchester & Hartford Traction Co. has petitioned the General Assembly for incorporation to build an electric railway from Norwich through Colchester, Bozrah, Lebanon, Marlboro and Glastonbury to a connection at East Hartford with line leading to Hartford. At present there is no electric railway between Norwich and Hartford. It will be about 39 miles long. There are five river crossings and one railroad crossing. A large part of the line requires but little grading. Company also seeks right to develop water power. George E. Manning, Engr., Yantic, Conn., has made preliminary plans.

BUFFALO, N. Y.—A franchise has been granted by the town of Cheektowaga to the Cheektowaga Railway Co. to build a trolley line from Clinton St. and the Buffalo city line through the town of Cheektowaga to the intersection of the Transit road and the Lawson road at the Lancaster town line. The road in Cheektowaga will be six miles long, double-tracked. Its extensions in other towns are not indicated in the present grant. Charles L. Williams, William H. Kinch and E. L. Ryan are the incorporators of the company, which has $75,000 capital stock at present. Company will apply to the state railroad board for a certificate of necessity. The proposed line would serve the territory adjacent to the New York Central's gravity yards that are to be built in Cheektowaga and the line will cross the yards on an overhead structure about 2,000 feet long. The franchise limits the fare to five cents for adults and three cents for children and fixes the term of the franchise at 50 years.—Noted on Jan. 31.

TOMKINS COVE, N. Y.—The State Board of Railroad Commissioners has granted permission to the proposed West Shore Traction Co., according to the New York "Sun," to construct a high-speed electric road 25 miles long, from Tomkins Cove along the Hudson River to the State line at Cartaret, Rockland County, passing through ten villages. The company has a capital of $250,000. It is being promoted by Searing & Co., bankers, 7 Wall St., New York City. It is reported that the West Shore Traction Co. will extend its line from the State line 15 miles through the State of New Jersey to Jersey City, and will eventually enter New York City through the McAdoo tunnel.

AUBURN, N. Y.—The Auburn & Northern Electric R. R. Co. has authority to increase its capital from $250,000 to $1,500,000. The company is to operate a street railroad from Auburn to Port Byron and from Auburn to Cayuga and across Cayuga Lake to Seneca Falls. C. D. Beebe, Syracuse, N. Y., is Gen. Mgr.

LEDERACHVILLE, PA.—The Montgomery County Rapid Transit Co. will build an extension under the title of the Lederachville & Pennsburg Elec. Ry. Co. Noted last week.

ALEXANDRIA, PA.—The Alfaretta Electric Street Railway Co., which was chartered in December, has organized as follows: John Phillips, Pres.; Henry Knode, Vice-Pres.; Samuel I. Spyker, Secy.; W. G. Kenaga, Treas. The capital of the company is $75,000. Company will build a line from near Alexandria to Tyrone Forge, where it is to connect with the Logan Valley Road, which runs to and through Tyrone.

ALLENTOWN, PA.—The Franklin & Towamensing Electric St. Railway Co. will apply for a charter to build an electric railway from Weissport through North Weissport and Phifer's Corner to Harrity, down Big Creek to Parryville, and thence to Bowmanstown, Hazard, Palmerton and Millport. The incorporators are: A. P. Berlin, John T. Semmel, Dale Craig, H. J. Bretney and T. J. Fretz.

MIFFLINBURG, PA.—The Lewisburg & Mifflinburg Electric Railway Co., at a recent meeting, elected three new directors; Horace W. Orwig and Dr. O. K. Pellman, of Mifflinburg, and J. Fred Kurtz, of Lewisburg. Work will be commenced on the road soon and it is said that the cars will be running by Jan. 1, 1908.

SANDY SPRING, MD.—The Sandy Spring Ry. Co., we are officially informed, is using force-account work only at present in building its line. It will be 28 miles long, extending from Chevy Chase to Ellicott City, Md. The railway is now in operation between Chevy Chase Lake and Kensington, Md., 2½ miles. It is planned to extend this line this spring to Brookeville River, north of Wheaton, two miles. Surveys have been partly made and right-of-way partly obtained. Charles F. Brooke is Pres., at Sandy Spring. R. H. Phillips is Ch. Engr. and Mgr., 1410 H St., N. W., Washington, D. C. Noted on Jan. 24.

DECATUR, ALA.—Referring to the improvements proposed by the North Alabama Traction Co., W. R. Hall, Mgr., at New Decatur, writes us that company will do all work with its own forces. Noted on Feb. 14.

HENDERSON, KY.—T. Bethell, of Henderson, who is promoting the Evansville, Henderson & Uniontown Traction Co., advises us that company will build an electric line following the Ohio River to a point beyond overflow mark, about 25 miles long, through an agricultural section, connecting Henderson, Uniontown, Ky., and Evansville, Ind. Mr. Bethell is also interested in the Western Kentucky Traction Co., which plans to build 100 miles of line in Western Kentucky.

HENDERSON, KY.—The Henderson Traction Co., capital $150,000, has been incorporated by Walter Schmidt, of Cincinnati; James W. Garrison and Samuel McDonald, of Louisville; C. C. Tennis, of Pittsburg, Pa.; A. O. Brown & Co., New York, and J. H. Lyne, Henderson, Ky.

COLUMBUS, OHIO.—The articles of incorporation of the Toledo & Columbus Railway Co., which was incorporated Aug. 3, 1905, have been amended to permit the company to build, acquire, own, lease, operate and maintain a railroad to be operated by electricity or other power, with terminus at Columbus and Toledo. The incorporators are: Forest E. Walker, Henry J. Rohrs, Carrie M. Jones, William E. Brown and Herbert Davis.

MANSFIELD, OHIO.—We are officially advised that the Mansfield & Wooster Electric Ry. Co. will let contracts for construction of its line when financial arrangements are made. The railway will connect Mansfield and Wooster, a distance of 41 miles. Survey has not been made. Right-of-way is partly secured. Samuel L. Kinsey is Pres., Pittsburg, Pa.; J. L. Barr is Secy., Mansfield.

CANTON, OHIO.—We are officially advised that contract has been awarded by the Canton & Youngstown Ry. Co. to the COLLINS CONSTRUCTION CO., 92 La Salle St., Chicago, for constructing a single-track trolley line, connecting the cities of Canton and Youngstown, Ohio, with a spur from a point north of Congress Lake to Akron, in all about 65 miles of track. The road has three terminals with a population of 50,000 and upward each. The average population served, per mile, including terminals, is over 3,200, and the [illegible] opens up between Akron and Young[illegible] a new country not having trolley faci[illegible]. A large part of the bond issue has [illegible] provided for. About $700,000 of bond[illegible] yet open for subscription. Total au[illegible]ed, $2,500,000, 25 years, 5% gold bond[illegible]ough it is estimated that $2,000,000 o[illegible] bonds will complete and equip the road [illegible] first-class manner; balance of bonds re[illegible]ng in treasury for future betterment. [illegible]est, etc. Further information regardi[illegible]nds may be obtained from Norman C. R[illegible], 65-65 Wall St., New York.

SAGINAW, MICH.—J. A. [illegible]ck, Ch. Engr. of the Saginaw, Owosso & [illegible]ng Ry. Co., Owosso, Mich., advises [illegible]at contracts will be let this summer [illegible] building the projected line from Sagin[illegible] Lansing, via Owosso, 64½ miles. J. [illegible]ing, of Syracuse, N. Y., is Pres.; C[illegible]es W. Baird, Pres. of the Iron & Steel [illegible] is Vice-Pres.; Frank West, Secy.; Geor[illegible] Black, Treas. Surveys are run and ri[illegible]-way secured. The line will be constru[illegible] upon private right-of-way except throug[illegible] cities. Noted on Feb. 7.

EAU CLAIRE, WIS.—A [illegible]esentative of the Chippewa Valley Elect[illegible] R. R. Co. and William Frayler, Mayor of [illegible] Claire, have submitted a proposition to [illegible] business men at Gilmanton, regarding th[illegible]onstruction of an electric railway between [illegible] city and Gilmanton. The proposition is [illegible]at Gilmanton raise $125,000, Eau Clair[illegible] same sum; also to raise $300,000 more [illegible]onds to build the railway, connecting the [illegible] places.

ALBIA, IOWA.—The City Council has passed the franchise gran[illegible] Calvin Manning, of Ottumwa; C. J. R[illegible], of Chicago; A. S. Kimberly, of New York, and J. B. Judd, of Pittsburg, the use of the streets of Albia for an electric railway. Those seeking the franchise have bought the Albia Electric Light & Power Co., for $3[illegible], and with a little additional equipment at the plant expect to operate the proposed street car system. An election will be held on March 18, at which date the voters will pass on the franchise. It is the intention of the promoters to extend the system to Hocking, two miles south of Albia, and to Buxton, ten miles north of Albia, with a 3-mile spur reaching Hiteman.

JEFFERSON CITY, MO.—We are officially advised that the Missouri Interurban Ry. Co. will award contract for construction of its line about April 15. Capital is now being subscribed. The line will connect Jefferson City with Sedalia, and will be about 75 miles long. J. D. Starke is Pres., at Jefferson City. B. H. Colby, Security Bldg., St. Louis, is Ch. Engr. Right-of-way has been obtained and surveys have been run. C. W. Thomas is Secy., Jefferson City. Noted on Jan. 24.

SPOKANE, WASH.—We are officially informed that the Okanogan Electric R. R. Co. probably will let construction contracts before June. Survey is being made. Right-of-way is obtained. It is expected to begin work soon. Power will be generated along the route at points controlled by the company. The line will run from Nighthawk to Loomis, Cuess, Conconully and Omak, about 60 miles. L. K. Armstrong, Engr., Spokane, is interested.

PASADENA, CAL. — The Pasadena, La Canda & Los Angeles Railroad Co. will soon make application to the City Council for a franchise along certain streets in the city for an electric railway which is to connect the three cities named in the title. The capital stock is $1,000,000. George E. Smith, of Pasadena, is Pres.; C. G. Compton, Long Beach, Cal., First Vice-Pres.; A. H. Green, Los Angeles, Second Vice-Pres.; H. M. Orr, Los Angeles, Secy. and Treas.; also A. B. Armstrong, Los Angeles; Barclay H. Potter, La Canda; F. W. Cresswell, Pasadena. The officers of the company are in the Grosse Building, Sixth and Spring Sts., Los Angeles.

SAN FRANCISCO, CAL.—John B. Rogers, Ch. Engr. of the Ocean Shore Ry. Co., 52 Eleventh St., San Francisco, advises us that grading is about 75% completed on its line between San Francisco and Santa Cruz, 80 miles, along Pacific shore. The contractors are: The RANSOME CONSTRUCTION CO.; the SHATTUCK & DESMOND CONSTRUCTION CO.; the RIALTO CONSTRUCTION CO., all of San Francisco, and PRATIBUSS & CHADWICK, of Santa Cruz. Noted on Feb. 21.

TORONTO, ONT.—We are officially advised that the Huron & Ontario Ry. Co. will let contracts about April 1 for building its proposed line between Toronto and Windsor and Toronto and Owen Sound. Surveys are made and right-of-way is partly secured. Capital for construction has been obtained. Third-rail system will be used. S. F. Kilgore is Pres.; T. H. Kilgore is Secy., and H. W. Middlemest is Ch. Engr., all at Toronto, Ont.

A petition has been presented to the Ontario Legislature to incorporate the Toronto Elevated Railway Co., with authority to build and operate elevated street lines through the city of Toronto and to East Toronto, North Toronto, Toronto Junction and other points in the County of York. The petitioners are: M. J. Adams, J. H. McKnight, S. R. Wickett, J. M. Sinclair and R. F. Segsworth.

LIGHT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

MERRIMACK, N. H.—Plans are being formed for developing power at Moore's Falls on the Merrimack River, between Merrimack and Litchfield. It is proposed to construct a 17-ft. dam and a power-house on the Litchfield side of the river at the foot of the locks of the Locks & Canal Co. It is estimated that the project will represent an investment of about $600,000.

OPPENHEIM, N. Y.—It is reported that the East Creek Electric Light & Power Co., of East Creek, which has purchased property here, proposes to construct a dam 111 ft. high across East Canada Creek, in connection with its proposed power-house at Inghams Mills. William A. Frederick is Supt., East Creek, N. Y.

CAVENDISH, VT.—It is reported that the Black River Electric Lighting & Power Co. has been granted an amendment to its charter by the Vermont Legislature for the right of property for building dams and flowing land for water purposes on Black River. The company is planning to place a dam at Cavendish Gorge and to construct a power plant having a capacity of 2,000 HP. L. N. Wheelock, of Claremont, N. H., is Mgr.

BOSTON, MASS.—The contract for two direct-current, engine type, electric generators has been awarded to the ALLIS-CHALMERS CO., through the Stone & Webster Engineering Corporation, 84 State St., Boston. Each machine will have a capacity equivalent to 10,000 HP. They will be used on the new extension of the Boston Elevated Ry., and will be ready to operate Nov. 1 next. John W. Corning, Boston, is Electrical Engr.

PROVIDENCE, R. I.—The Vanity Fair Co. has awarded contract to the NARRAGANSETT ELECTRIC LIGHTING CO. for installation of an electrical plant at "Vanity Fair," a summer resort under construction in this city, at a cost of $75,000. The lighting company agrees to furnish electricity at a pressure of 10,000 volts, building for that purpose a fireproof transforming station, and installing the machinery for the plant. The plant will provide for not less than 125,000 incandescent lamps. Fred. N. Bushnell is Ch. Engr. of the lighting company.

LOCKPORT, N. Y.—The directors of the Economy Light, Fuel & Power Co. have decided upon a bond issue of $250,000 for the purpose of purchasing additional generating and electrical equipment. George H. Downs, Lockport, is Ch. Engr.

LE ROY, N. Y.—It is reported that the Le Roy Hydraulic Electric Gas Co. is planning to develop its power more fully in the summer, and to extend its lines to reach all factories within the city limits. A. R. Tremaine is Supt.

LEWISBURG, PA.—The LEWISBURG LIGHT, HEAT & POWER CO. has been awarded contract for lighting the streets of the borough of Lewisburg for a term of three years. By means of the contract the company is to furnish arc lamps at $71.50 per lamp a year and incandescent light at $14.50 per lamp a year. C. E. Pugh, Lewisburg, is Mgr.

BALTIMORE, MD.—It is reported that the United Railways & Electric Co., Continental Bldg., will erect power-house near Bay Shore Park to cost about $100,000, and two sub-stations, one at 708 West Lombard St., and the other on Hartford Ave., to cost $200,000 each. C. O. Vandevauter is Ch. Engr.

WASHINGTON, D. C.—Bids were opened Feb. 28 at the office of Elliott Woods, Supt. of the U. S. Capitol Building and Grounds, Washington, D. C., for furnishing boilers, superheaters and stokers for the heating, lighting and power plant for the Capitol Buildings, Washington. Bids were as follows, the alternates being on various sorts of boilers, superheaters and stokers: Atlas Engine Works, Indianapolis, Ind., $97,902, alternates, $98,362, $104,710, $100,270, $97,-960, $98,670, $103,940, $98,750, $98,050, $102,750; Babcock & Wilcox Co., 85 Liberty St., New York (on Stirling boilers), $134,926, alternates, $138,100, $139,200, $143,450; Mosher Water Tube Boiler Co., 1 Broadway, New York, $163,300, alternates, $162,100, $164,400; Babcock & Wilcox Co. (on Babcock & Wilcox boilers), $164,800, alternates, $168,000, $169,100, $173,400; Edge Moor Iron Co., Edge Moor, Del., $172,436, alternates, $172,100, $177,200, $169,630; Heine Safety Boiler Co., Pennsylvania Bldg., Philadelphia, Pa., $173,300, alternates, $173,260, $174,216, $177,900; Rust Boiler Co., Pittsburg, Pa., $197,000, alternates, $197,500, $200,000, $199,500. The superintendent has awarded the contract to the ATLAS ENGINE WORKS, Indianapolis, Ind., on their principal bid of $97,902. The successful bidder will use the Atlas Water Tube Boiler, the Foster superheater, and a type of stoker to be determined later.

CLIFTON FORGE, VA.—Bids are asked until 8.30 p. m., April 8, by E. A. Snead, Pres. of City Council, for constructing an electric lighting system at Clifton Forge. John A. Bowers is Mayor; J. O. Jordan is Clk.

PETERSBURG, VA.—Marcus R. Williams, of Poplar Mount, Va., is preparing plans for the Nottoway Hydro-Electric Co., for the construction of dam, canal and power plant for the development of electric power by water, at a cost of $150,000. S. H. Turner, of Petersburg, is Secy.

BARNWELL, S. C.—It is reported that G. B. Barnwell will install an electric lighting plant, having a capacity of 150 HP.

MACON, GA.—Bids are asked until 3 p. m., April 4, by James Knox Taylor, Superv. Arch., Washington, D. C., for installing conduit and wiring system in the enlargement of the U. S. court-house, post-office, etc., at Macon. (Advertised, Engineering News.)

COLLEGEPARK, GA.—It is reported that the Solomon-Norcross Co., of Augusta, is preparing plans and specifications for an electric light plant, water-works and sewer system. J. S. Arnold is City Clk.

ALBANY, GA.—The Albany Power & Mfg. Co. has awarded contract to the GENERAL ELECTRIC CO., of Schenectady, N. Y., for installing a 1,500-HP. generator. Water wheels will be installed. Estimated cost, $20,000. E. S. Killebrew is Supt.

ALBANY, GA.—It is reported that the Albany Power Co. is considering the further development of Muckafoonie Creek, which now has a capacity of 3,000 HP., and the development of water power on the Flint River. It is estimated that a total capacity of 12,000 HP. can be obtained. Arthur Giesler, 29 Broadway, New York, has been engaged to make examinations, etc., of the water powers.

WASHINGTON, GA.—It is reported that the Anthony Shoals Power Co. has increased its capital stock to $5,000,000 and is planning to build a 30-ft. dam across the Broad River to develop power for transmission by electricity for power and lighting purposes to Washington and other cities. It is said that New York capitalists will furnish the capital for construction work and effecting final organization of the company. The company has bought the Ringjaw Shoals property and proposes developing it in the future, 30,000 HP. being available. Anthony Shoals is estimated to furnish 15,000 HP. The Anthony Shoals dam will be 75 ft. high, 1,500 ft. long at the top and 600 ft. long at bottom. The contract has not yet been awarded. A $500,000 cotton mill, a large cotton-oil mill and a paper pulp mill are said to be enterprises that will be established at Washington to utilize some of the power that will be transmitted. J. H. Fitzpatrick is Pres. of Anthony Shoals Power Co.

OXFORD, MISS.—It is reported that a 200-KW., three-phase, 1,100-volt, 60-cycle generator will soon be installed in the University light plant. E. Campbell is Supt.

MERIDIAN, MISS.—The Meridian Light & Ry. Co. will expend about $25,000 in improvements to gas plant and system of mains. It is proposed to install within the next 18 months a water-gas set with capacity of 250,000 ft. daily in new building 35 × 50 ft., and within next year, to lay from three to five miles of 4, 6 and 8-in. mains. A. B. Preston is Mgr.

LOUISVILLE, KY.—Bids will be received in about a month for constructing proposed plant for the Kentucky Electric Co. L. S. Streng is Ch. Engr. The E. H. ABADIE CO., Bank of Commerce Bldg., St. Louis, Mo., has secured contract for constructing conduits for this system.

FORT WAYNE, IND.—See under Manufacturing Plants.

INDIANAPOLIS, IND.—It is reported that the Indianapolis Light & Heat Co. has decided to build a substation on East Ohio St., to increase the direct current for down town commercial lighting. T. A. Wynne is Supt.

ESCANABA, MICH.—Bids are asked until March 23 for improvements to the electric light plant, to include one 175-KW. generator complete, a new switchboard complete, wiring, apparatus, etc., one 600-HP. open heater and a pump to provide water for all purposes. Estimated cost of work, $16,000. John Roemer is Mgr.

GRAND RAPIDS, MICH.—It is reported that the Grand Rapids Hydraulic Co., Grand Rapids, Mich., will replace its power plant, which was recently burned, with a reinforced concrete building, the construction of which will not be begun until summer.

NEGAUNEE, MICH.—The Board of Public Works is contemplating enlarging the power-house of the municipal electric light plant and making about two miles of line extension. H. T. Pearce is Supt.

CHICAGO, ILL.—Francis M. Barton, 169 Jackson Boulevard, is preparing plans for a plant for the Marshall & Huschart Machine Co., the power plant of which will have a capacity of 300 HP. Estimated cost of work, $125,000. Contracts for buildings and power plant will be let about April 15.

CHICAGO, ILL.—The Chicago Sanitary District on Feb. 20 received the following bids for constructing transmission line to Morgan Park, Blue Island and Dolton: Johnson, Bailey & Saunders, Buffalo, (a) $27,103 for lines complete, (b) $56 and $48 credit for each miles of Nos. 4 and 6 bare wire, (c) $3 extra for each 40-ft. pole; Arthur Frantzen Co., 92 West Vanburen St., Chicago, (a) $34,575, (b) $32 and $20, (c) $7; Brennan Electric Construction Co., 330 Dearborn St., Chicago, (a) $36,850, (b) $55 and $48, (c) $8.

CLARKFIELD, MINN.—The Clarkfield Roller Mills & Electric Light Co. is considering the question of enlarging its electric plant, and installing a larger generator, engine and switchboard. G. H. Ledbetter is Mgr.

GARDEN CITY, KAN.—The Secretary of the Interior has granted an extension of time to the D'Olier Engineering Co., 121 South Eleventh St., Philadelphia, for the completion of their contract for furnishing an electric power plant for the Garden City Irrigation Project, Kansas. The date now fixed for the completion of the work under this contract is three months from the receipt by the contracting company of notification from the engineer in charge of the work that the building in which the plant is to be installed is completed. The delay in furnishing the power plant was necessitated by the fact that the building could not be completed on time owing to the failure of the railroads to deliver the materials.

LOUISVILLE, MO.—The Louisiana Gas & Electric Light Co. will double the capacity of its plant and change the system to a 2-phase, 60-cycle, 2,300-volt system within three months. D. Turnboldt is Mgr.

BOLIVAR, MO.—It is planned to increase the boiler capacity to 170 HP. and install a 150-HP. engine and a dynamo of 80 KW. capacity in the plant by April 1. W. H. Maas is Supt.

BLOOMFIELD, MO.—It is reported that the Bloomfield Electric Light, Heat & Power Co. is contemplating installing a water-works plant and a hot water system. B. F. Eicholtz is Mgr.

JOPLIN, MO.—The Missouri Lead & Zinc Co. is contemplating making improvements to its plant at a cost of about $25,000. This will include an addition to the power-house.

CHILLICOTHE, MO.—We are officially advised that bids will be received about April 15 for constructing an electrical plant for the city, which will cost about $100,000. Burns & McDonnell, Dwight Bldg., Kansas City, Mo., are Engrs.

ST. LOUIS, MO.—It is reported that the Roberts, Johnson & Rand Shoe Co., Tenth and Washington Sts., St. Louis, will erect three factories; one each at Cape Girardeau, Mo.; Washington, Mo., and St. Louis. Contracts for buildings have been let, and contracts for the power plants will be let at once. There will be required four engines, one of 200 HP., and three of 150 HP. R. L. Lund, Hickory and Mississippi Aves., St. Louis, is Des. Engr. for the proposed power plants.

DEVALL BLUFF, ARK.—It is reported that J. W. Baxter, of Fayetteville, Ark., and his associates propose to develop the water power of White River and furnish electricity for operating electric railways, lighting and power plants and manufacturing industries. It is their purpose to build a system of dams, or possibly locks, and to obtain from 15,000 to 20,000 HP. at different locations, the total available being estimated at 200,000 HP. A company will be incorporated and organized to build the railway and power plants, capital stock to be nominally $150,000 and be largely increased in the future. J. T. Evins, of Fayetteville, and J. C. Bonnell, of St. Louis, are interested with Mr. Baxter.

CHICKASHA, IND. T.—The city has granted franchise to Dennis O'Brien, of Chickasha, and Louis E. Wettling, of Lincoln, Neb., for construction of an electric light plant, carrying contract for 25 street lights. A company has been organized for development of the waters of the Washita River, constructing dam and building plant for the transmission of power to Chickasha for lighting and power purposes. Construction work will begin at once, and machinery has been purchased. It is estimated that about $100,000 will be expended.

BRECKENRIDGE, COLO.—Bids are asked by the Colorado Gold Dredging Co., Breckenridge, for constructing a 800-HP. hydro-electric power plant, with steam auxiliary. Carneg Hartley is Ch. Engr.; E. G. Tuttle is Mgr.

SULPHUR SPRINGS, COLO.—On Feb. 20 a bill was passed at Washington, D. C., granting to the Central Colorado Power Co. a right-of-way over public lands in Grand County for ditches and reservoirs, for the purpose of supplying irrigation, generating and distributing power to municipalities, mining and other companies. It is expected that this company will invest between $6,000,000 and $10,000,000 in Colorado.

WENATCHEE, WASH.—A company has been formed in this city by W. T. Clark, Marvin Chase and F. M. Scheble for the purpose of building a large power plant on the Wenatchee River. Articles of incorporation are being prepared and the capital stock is fixed at $100,000.

ROSLYN, WASH.—The Northwestern Improvement Co. is contemplating installing two 300-HP. direct-current units and an alternating-current 500-KW. unit in its plant. S. R. Claghorn is Mgr., Tacoma.

COMPTON, CAL.—It is reported that the Compton Lighting & Power Co. has purchased a franchise through G. R. Fulton, and has filed its articles of incorporation; capital, $50,000. The company will begin preparations for the erection of a 6,000-light plant on Pomegranate St. at once.

REDONDO, CAL.—The Pacific Light & Power Co. has petitioned Council for a franchise for a system of poles for heat, light and power; also for a franchise for a pipeline from power-house west on Ninth St. to the water front, for conveying oil and water for condensing to the new power plant.

PROSSER (Boca post-office), CAL.—EARLES & JOYCE, of Seattle, have secured the contract for the entire construction of the head works and power plant at Priest Rapids, on the Columbia River, for the Hanford Irrigation & Power Co.'s irrigation system. The contract calls for an expenditure of $300,000. Work will begin immediately and be completed during 1907.

FALLON, CAL.—It is reported that the U. S. Government is intending to erect a power plant on the great Truckee-Carson irrigation canals in Churchill County. The canals are now nearly finished and one of the main canals has been carrying water for several months. It is the plan of the Government to generate electrical power and transmit it by long-distance wires to the farms to be irrigated by the canals. This power will then be used in operating huge pumps which will irrigate all land above the level of the irrigation canals.

OGDEN, UTAH.—Plans are now being made by the Utah Light & Ry. Co., of Salt Lake City, for the construction of a substation in this city, at a cost of more than $10,000. O. A. Honnold is Ch. Engr.

HARBOR GRACE, NEWFOUNDLAND.—The Harbor Grace Electric Co. will erect 15 miles of transmission lines to supply two towns with electricity. Louis Williams is Supt.

BRACEBRIDGE, ONT.—The town is asking for permission to develop 1,800 HP. at High and Wilson Falls, on the North Branch of the Muskoka River. The town already has a development of 1,000 HP.

FT. WILLIAM, ONT.—Improvements contemplated by the Kaministiquia Power Co. at Ft. William, in connection with the Kakebeka Falls power plant, consist of the construction of 6,500 ft. of 10-ft. concrete flume, and the work will be executed by the company. R. S. Kelsch, Montreal, Que., is Consult. Engr.

WINNIPEG, MAN.—Bids are asked until April 1 for constructing power plant to cost about $3,500,000. Cecil Smith is Engr., Winnipeg.

INDIAN HEAD, SASK.—The town of Indian Head is preparing to spend some $25,000 on improvements to the electric lighting system. T. E. Donnelly is Mayor.

VANCOUVER, B. C.—The British Columbia Electric Ry. Co. will place contracts soon for the first part of the new electrical equipment for the new plant which the company is to install at Lake Buntzen. The present capacity of the plant is 12,000 HP., which will be increased by three units of 10,000 HP. each. The cost of improvements to the plant is estimated at $250,000. R. H. Sterling is Gen. Mgr.

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

LACONIA, N. H.—The city, sharing expense with the street railway company, will construct concrete bridge over street railway company's power canal. Estimated cost, including paving, $10,000. C. A. French is City Engr.

BARNSTABLE, MASS.—It is reported that S. E. Tinkham, City Hall, Boston, has prepared plans for constructing bridge over Bass River, between Yarmouth and Dennis. Estimated cost, $20,000. Alfred Crocker is Clk., County Comrs.

CAMBRIDGE, MASS.—The bridge over Lechmere Canal, at Commercial Ave., will be 50 ft. wide between fences; roadway, 35 ft. wide, and each sidewalk, protected by 4-ft. iron railings, 7½ ft. wide. In length, the bridge, including approaches from both ends, will be 125 ft. For the passage of vessels a draw-opening, 40 ft. wide, is provided in the plans; the bridge will be constructed of steel, in two parts, and will be of the Scherzer rolling-lift type. Concrete piers, each 21 ft. wide and 56 ft. long, will support the two leaves of draw; the piers will rest on piles. The only woodwork about the bridge will be the floor. Approximately 310,500 lbs. of structural metal will be used, and the counterweight composition will weigh about 228,600 lbs. Estimated cost, $55,000. The BOSTON BRIDGE WORKS, INC., 47 Winter St., East Cambridge, will construct steel parts, and HUGH FARRELL the piers. Construction will be begun at once. It is expected that the bridge will be open to traffic by Sept. 1. Lewis M. Hastings is City Engr.

GREENFIELD, MASS.—The Connecticut Valley St. Ry. Co. has awarded contract to the UNITED CONSTRUCTION CO., 467 Broadway, Albany, N. Y., for strengthening the Montague City electric road bridge, according to plans approved by Prof. Swayne, Engr. of Massachusetts Railroad Commission. Charles W. Clapp, at Greenfield, Mass., is Asst. Supt. and Engr.

PITTSFIELD, MASS.—The Boston & Albany R. R. Co. is considering construction of two steel bridges to replace wooden bridges at First St. and Benedict Road; the former will be 43 ft. wide and the latter 21 ft. E. E. Stone, at Springfield, Mass., is Asst. Ch. Engr. Bridges and Roadway.

ORANGE, MASS.—Bids are asked until 2 p. m., March 16, for constructing two iron bridges.

COHOES, N. Y.—The contract for constructing plate girder bridge was awarded on March 5 to MICHAEL FITZGERALD, of Hoosick Falls, for $26,951. Charles H. Van Auken is City Engr.

PATERSON, N. J.—Bids are asked by the County Board of Chosen Freeholders, George W. Botbyl, Clk., until 2 p. m., March 27, for constructing steel bridge, etc., across Passaic River at Straight St. (Advertised, Engineering News.)

PITTSBURG, PA.—Bids are asked until March 16 by the Union Bridge Co., of Pittsburg, for removing bridge structure and piers crossing the Allegheny River, from Water St. and Duquesne Way, Pittsburg, to Grant Ave., Allegheny. Joseph Ford is Secy.

READING, PA.—Bids are asked by the County Commissioners until 10 a. m., March 28, for constructing reinforced concrete arch bridge, 60-ft. clear span, to be known as Kissling's Bridge, across North Kill Creek, between Jefferson and Penn Townships, on road leading from Bernville to Rehrersburg. H. F. Livingood is County Controller. (Advertised, Engineering News.)

SCRANTON, PA.—Plans have been completed by Henry Jifkins, City Engr., for constructing five new bridges to be built by the city. Lackawanna Ave. bridge will be a low-truss structure, of three spans, and will be supported by two stone piers. Total length will be 250 ft. and estimated to cost $75,000. The Scranton St. bridge will be a one-span structure, 104 ft. in length, and cost $10,000. The Swetland St. bridge will be of plate-girder construction, 70 ft. long, and will cost $10,000.

BALTIMORE, MD.—The Board of Public Improvements is reported to have approved ordinance providing for construction of bridge over Gwynn's Run at Hollins St. Estimated cost, $11,500. B. F. Fendall is City Engr.

JARRATT, VA.—Bids are asked until March 21 by the Board of Commissioners of Greenesville and Sussex Counties, at the court-house, Sussex, for constructing riveted steel bridge at double bridge site, five miles west of Jarratt, and two miles from Tidewater R. R. Bridge to have two spans 100 ft. each, with 25-ft. approaches.

MONTGOMERY, W. VA.—The Montgomery Bridge Co. has been chartered to conduct a public toll bridge over the Kanawha River at Montgomery. The authorized capital is $100,000. The incorporators are George Love, Dr. O. J. Henderson, M. J. Simms, F. E. Smart, Geo. Champe and W. L. Montgomery.

SOUTH QUAY, VA.—The ROANOKE BRIDGE CO., Roanoke, Va., has been awarded contract for constructing steel bridge over Blackwater River at South Quay, between Southampton and Nansemond Counties, at $9,000. Bridge to be 150 ft. long, with draw of about 60 ft. Paul C. Everett, Suffolk, Va., is Supervisor of Nansemond County.

MILTON, FLA.—A drawbridge will be erected across Blackwater River, at this place.

SHREVEPORT, LA.—At a recent meeting of the City Council of Shreveport and the Police Jury of Bossier Parish it was decided to build a free traffic bridge across Red River at this place. Cost, $175,000.

LOUISVILLE, KY.—Bids are asked by H. Burgess, Capt., U. S. Engrs., Louisville, until noon, April 8, for steel or w.-i. trestles, etc., for Boule dam. (Advertised, Engineering News.)

SALEM, OHIO.—The County Commissioners will erect new bridge to replace present structure west of Salem on the Damascus Road, known as the Old Whinnery bridge.

LORAIN, OHIO.—The Lake Erie & Pittsburg R. R. Co. has made formal application to the Cuyahoga County Commissioners for franchise to close six highways. The contract as presented asks for privilege of constructing wooden bridges with 20-ft. driveway.

TIFFIN, OHIO.—The Board of County Commissioners is reported to have adopted plans and specifications for repairing Perry St. bridge. Estimated cost, $5,700.

TOLEDO, OHIO.—Bids are asked until March 28 by the Board of County Commissioners, J. W. Kerr, Chmn., for furnishing material and constructing substructure and superstructure of two bridges, one over Blue Creek and the other over Gary Ditch, both in Providence Township.

CLEVELAND, OHIO.—We are officially advised that bids were received by the Board of County Commissioners March 9 for (a) constructing culvert, Strongsville Township, and (b) bridge, Bedford Township, as follows: (a) W. H. Otter, $1,556; P. H. Carey, $1,674; W. A. Hare, $1,451; Thomas B. Husband, $1,738; Enterprise Paving & Construction Co., $1,752, and Henry Fieldhouse, $1,601. (b) Capitol Construction Co., $4,655; Interstate Engineering Co., $3,828. Brookville Bridge Co., $3,699, and Cleveland Bridge Co., $4,700. Julius C. Dorn is Clk.

CROOKSVILLE, OHIO.—Bids are asked by the County Commissioners until noon, March 21, for labor and material for constructing substructure of bridge at Main St., Crooksville, and for substructures near the Star Pottery shop, Crooksville. George T. Drake is County Audr.

ZANESVILLE, OHIO.—Bids are asked by County Commissioners until noon, March 25, for labor and material for erecting superstructure of south span of highway bridge in Newton Township. Span is to be 88 ft. long. L. E. Breisford is County Audr.

CRAWFORDSVILLE, IND.—Bids are asked until 10 a. m., April 2, for constructing three steel bridges, one concrete arch and for repairing steel bridge. James A. Harding is Engr.

INDIANAPOLIS, IND.—Bids are asked by the County Commissioners until 10 a. m., March 26, for construction of bridge over White River at 30th St. C. J. Clarke is County Audr. The bridge will be built of Indiana oolitic limestone. Estimated cost, $180,000.

CHICAGO, ILL.—Members of the Southwest Improvement Association have petitioned the Drainage Board to build bascule bridge of modern type across main channel of Sanitary District Canal at Western Ave. Cost, $100,000.

SUPERIOR, WIS.—Bids are being received by the Board of Public Works for repairing bridge over Memadji River at Fourth St. S. M. White is City Engr.

BELOIT, WIS.—At a recent meeting of the Rockton Township Highway Commissioners it was voted to proceed with erection of modern steel or cement bridge over Turtle Creek at Wheeler Ave. in South Beloit and connecting with Prospect Ave. in this city. Estimated cost, $6,000.

DES MOINES, IOWA.—Bids will soon be asked for constructing Locust St. bridge. Estimated cost, $100,000. George D. Dobson is City Engr.

CLINTON, IOWA.—The single track bridge over Mississippi River at this point is to be replaced by a modern double track bridge by the Chicago & Northwestern R. R. Co. According to provisions of bill which has recently passed the national legislature the ALBANY RAILROAD BRIDGE CO. has authority to build a new bridge, providing the work is commenced within a year and completed within three years.

INTERNATIONAL FALLS, MINN.—It is reported that bids will soon be asked by the Town Board for constructing bridge at Malmlin's Ferry.

WICHITA, KAN.—The St. Louis & San Francisco R. R. Co. will construct steel trestle bridge, about 60 ft. in length, across drainage canal where it intersects the Frisco right-of-way, near Twelfth St. F. S. Rice, at St. Louis, Mo., is Engr. Bridges and Bldgs.

LINCOLN, NEB.—It is reported that William Grant, City Engr., is preparing plans for constructing viaduct over tracks of Burlington, Northwestern & Missouri Pacific R. R. at North Tenth St. The structure to be 1,200 ft. long, 56 ft. wide, and cost about $150,000.

SHOSHONI, WYO.—The Beysen Mining Co. is planning to construct bridge across Big Horn River.

GLENDIVE, MONT.—Bids are asked by the U. S. Reclamation Service, James R. Garfield, Secy., until 2 p. m., April 25, for constructing 16 steel and 20 combination wood and steel highway bridges in connection with Lower Yellowstone Project, N. Dak.-Mont. H. N. Savage, at Huntley, Mont., is Superv. Engr. (Advertised, Engineering News.)

BROOKFIELD, MO.—It is reported that bids are being received by T. L. McMichael, County Surv., for repairing various bridges in the county.

FT. SMITH, ARK.—The Midland Valley Railway Co. has decided to rebuild bridge across Canadian River. J. F. Holden is Gen. Mgr.

PARIS, ARK.—The HENRY PHILLIPS BRIDGE CO., of Ottumwa, Iowa, has been awarded contract for constructing five steel bridges in Logan County.

CHANDLER, OKLA.—Bids are asked by J. B. Rea, County Clk., until March 23, for constructing a 45-ft. span steel bridge. Bids also are asked for rebuilding 75-ft. pile bridge in Lincoln County.

MANGUM, OKLA.—Bids are being received by the County Commissioners for constructing six steel bridges.

PORTERVILLE, CAL.—Bids are asked by Robert Horbach, City Clk., until March 18 for constructing steel bridge.

SAN BERNARDINO, CAL.—The OTTUMWA BRIDGE CO., of Ottumwa, Iowa, has been awarded contract for constructing bridge across Mojave River, at $13,900. Bids were also received from the following: Riverside Foundry & Machine Co., of Riverside, Cal., $15,951; John Gilligan Co., of Falls City, Neb., $14,300; Midland Bridge Co., of Kansas City, $15,470; Union Iron Works, of Los Angeles, $15,556; American Bridge Co., of New York, $16,500; Concrete Pipe & Construction Co., of Riverside, $16,500; Thomas Rothwell, Los Angeles, $19,900; Mercereau Bridge & Construction Co., of Los Angeles, $15,490; Atlantic, Gulf & Pacific Co., of Los Angeles, $16,424, and Clarence W. Swain, of Ionia, Cal., $15,800.

ST. THOMAS, ONT.—Contracts have been awarded as follows: Construction of Willey bridge for counties of Middlesex and Elgin: steel frame work, PETROLIA BRIDGE CO., successful bidders, at $7,450; other bidders, Ontario Bridge Co., $10,000; Hamilton Bridge Co., $9,935; Port Huron Bridge Co., $9,749. Cement foundation and flooring, PETROLIA BRIDGE CO., successful bidders, at $5,900; other bidders, Ludy & Magia, $7,000; L. Crouts, $7,740; F. E. L. Talbot, $7,500; R. Rivers, $8,600; S. Pearson, $6,996; D. Witherspoon, $6,870; L. McCandless, $7,294; N. Mitchell, $8,100. Construction of Cook's Mill bridge for counties of Middlesex and Elgin: steel frame work, HAMILTON BRIDGE CO., successful bidders, at $3,926; other bidders, Ontario Bridge Co., $3,950; Jenks & Dresser, $4,224. Concrete work, S. HARPER & SON, successful bidders, at $2,700; other bidders, C. Stafford, $3,197; L. McCandless and J. Vincent, $2,987.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

SALEM, MASS.—The High School Commission has rejected all bids for the construction of the high school building, from plans by Wm. G. Rantoul, Arch., 6 Beacon St., Boston, and has directed him to reduce his plans, so that the building may be constructed within the appropriation of $250,000. Thomas G. Pinnock is Chn. of Com.

BROOKLINE, MASS.—Sturgis & Barton, Archs., 120 Boylston St., Boston, have been engaged to draw plans for a library building for Brookline, to cost about $400,000.

NEW YORK, N. Y.—Plans have been filed with the Buildings Superintendent for two 6-story apartment houses to be built for the Conforti Realty Co., one on 123d St., and the other on 124th St., 100 ft. east of Broadway. They will have a frontage of 75 ft. and a depth of 87 ft., with accommodations for 29 families. Each is to cost $150,000. Nicholas Conforti, Pres. of the corporation, is Arch.

Plans have been filed for a 12-story loft and office building to be built at 29 West 32d St., running through to 33d St., for the Bankers' Construction Co., William Manger, Pres. The structure will cost about $900,000. Clinton & Russell, 32 Nassau St., are Archs.

NEW YORK, N. Y.—The following are the bids opened on March 4 by C. B. J. Snyder, Supt. School Bldgs., for general construction of addition to and alterations in School 24, Brooklyn: John Auer & Sons, 957 Broadway, Brooklyn, $169,995; F. T. Nesbit & Co., Inc., $175,000; GEORGE F. DRISCOLL, 391 Fulton St., $152,000 (awarded contract); George Hildebrand, $161,700; James MacArthur, $177,236; William Warner, $171,930; Arci Construction Co., 99 Broadway, Brooklyn, $164,700.

Bids are asked until 2 p. m., March 21, by James W. Stevenson, Comr. of Bridges, for the construction of a shelter house on the Brooklyn plaza of the Williamsburg Bridge over the East River, between the Boroughs of Manhattan and Brooklyn.

Maximilian Zipkes, Arch., 147 Fourth Ave., has been commissioned by Harry Lehr to draw plans and specifications for the erection of two 6-story elevator apartments on a plot on Cathedral Parkway, between Seventh and Eighth Aves., on a frontage of 125 ft. The buildings will be designed to embrace all of the modern and up-to-date improvements and will cost, according to the architect's estimate, about $250,000.

NEW YORK, N. Y.—Raymond F. Almirall, 51 Chambers St., City, Arch., acting for the Commissioner of Charities, has filed with the Building Superintendent plans for two new recreation pavilions to be built on Blackwell's Island for the benefit of the inmates of the City Home for the Aged and Infirm. The pavilions are to be of fireproof construction, with peaked roofs, the larger for the accommodation of the male inmates, being 160 ft. long and 60 ft. wide, and the other, for the women inmates, being 130 ft. long and 60 ft. wide. They are to cost $25,000 each. Plans were also filed for the new group of six administration buildings to be erected on Blackwells Island as annexes to the City Hospital. The group includes two 1-story reception houses, with a frontage of 82 ft. and a depth of 34 ft., to cost $50,000; a 1-story operating pavilion to cost $25,000; a 3-story kitchen and service building to cost $120,000; a 2-story and attic residence for the hospital superintendent, to cost $20,000, and a 3-story and attic residence for the medical staff, to cost $54,000. The total to be expended is $319,000.

NEW YORK, N. Y.—Bids are asked until 3 p. m., April 11, by the Park Board for erection and completion of the interior finish in the New York Public Library, Astor, Lenox and Tilden Foundations, Fifth Ave., 40th and 42d Sts. Moses Herrman is Pres.

The following bids were received March 11 by C. B. J. Snyder, Supt. School Bldgs., for the general construction of additions to and alterations in Public School No. 96, on the east side of Ave. A, between East 81st and 82d Sts, Boro. of Manhattan: JOHN KENNEDY & CO., 1133 Broadway, $121,220 (awarded contract); Thomas McKeown, 521 West 110th St., $125,400; Guidone & Galardi, 1 Madison Ave., $135,500; George Hildebrand, 38 Park Row, $129,600; P. J. Brennan & Son, 23d St. and Broadway, $124,975; James T. Kerr, 205 West 30th St., $121,345; Edward Broderick, 115 East 90th St., $135,449; Thomas Cockerill & Son, 147 Columbus Ave., $128,300; J. & L. Moreland Co., 1910 Park Ave., $121,273; Patrick Sullivan, 230 Grand St., $136,000; A. Nugent & Son, 12 East Twelfth St., $123,790; William Werner, 892½ Forest Ave., $133,900; Patrick Gallagher, 1189 Broadway, $132,900.

The bids received March 11 by C. B. J. Snyder, Supt. of School Bldgs., for the general construction of new Public School No. 100, on 138th and 139th Sts., about 100 ft. west of Fifth Ave., Boro. of Manhattan, were as follows: Charles H. Peckworth, 415 Hudson St., $519,440; William Werner, 892½ Forest Ave., $582,000; A. Nugent & Son, 12 East Twelfth St., $519,700; Patrick Sullivan, 230 Grand St., $558,000; Richard E. Henningham, 1 Madison Ave., $547,394; Thomas Cockerill & Son, 147 Columbus Ave., $564,000; George Hildebrand, 38 Park Row, $543,800; Clarke & Stowe, 221 Greenpoint Ave., Brooklyn, $527,000; F. T. Nesbitt Co., Inc., 116 Nassau St., $589,500; Thomas McKeown, 521 West 110th St., $553,449.

NEW YORK, N. Y.—Bids are asked until 3 p. m., March 28, by the Park Board for the erection and completion of an elephant house in the New York Zoological Park, in Bronx Park, City of New York. Moses Herrman is Pres.

NEW YORK, N. Y.—Bids are asked until 3 p. m., April 4, by James Knox Taylor, Superv. Arch., Washington, D. C., for installing steel file cases and framing and mezzanine floors, etc., in connection therewith at the U. S. custom-house, New York. Cass Gilbert, 11 East 24th St., New York, is Arch. (Advertised, Engineering News.)

WEST POINT, N. Y.—Regarding building construction and general improvements at West Point, we are officially advised that the total cost of expenditures for the work of reconstruction has been limited by Congress to the sum of $7,500,000, of which $3,300,000 thus far has been made available for use. The following improvements have been completed: Completion of cadet mess hall, $127,349. E. A. MATTHEWS, 13 Park Row, New York, contract for construction of storm sewer, surface drainage and sewer system, $38,703; LLOYD COLLIS, New York, contract for building intake and laying c.-i. conveying pipe for increase of water supply of the post, $52,158. Contracts have been awarded and are now in progress, as follows: CHURCH CONSTRUCTION CO., 949 Broadway, New York, artillery barracks, artillery stables, artillery gun shed, cavalry barracks, cavalry stables, $400,376; bachelor officers' quarters, $268,125; erection of power-house (exclusive of structural steel work), $167,200. J. B. & J. M. CORNELL, 26th St. and Eleventh Ave., New York, structural steel work of power-house of central lighting and heating plant, $58,780. GENERAL ELECTRIC CO., Schenectady, N. Y., electric generators, motor generators and switchboard, $42,700. ROBINS CONVEYING BELT CO., 13 Park Row, New York, coal conveying apparatus for power-house, $19,610. PROVIDENCE ENGINEERING WORKS, Providence, R. I., Corliss engines for power-house, $32,970. THE BABCOCK & WILCOX CO., 85 Liberty St., New York, boiler and mechanical draft plant for power-house, $37,477. J. W. BISHOP & CO., 109 Foster St., Worcester, Mass., post headquarters building, $428,624. A. A. SANBORN, 18 Post Office Sq., Boston, Mass., steam heating post headquarters building, $11,002. THE U. S. FIDELITY & GUARANTY CO., Calvert and German Sts., Baltimore, Md., completion of cadet barracks, $235,469; completion of officers' quarters, succeeding original contract of Broderick & Wind Engineering and Construction Co. of New York, $507,500. THE RUSSELL CONTRACTING CO., 156 Fifth Ave., New York, electric subway system, $64,372. In connection with erection of buildings a large amount of work has necessarily been undertaken, such as excavating, grading of sites, construction of roads, retaining walls, sidewalks, water and gas mains, quarrying of building stone, construction of foundation of post headquarters building, tunnels for steam supply mains to various public buildings, increase of water supply of the post, and landscape improvement.

During the coming season, proposals probably will be received for the construction of a new gymnasium, but date of advertisement has not yet been determined for this and other new buildings, which will be included in the work of reconstruction, such as new hotel, chapel and quarters for chaplain, riding hall, academic building, cadet headquarters, tower of public elevator, group of quarters including accommodations for superintendent and staff officers; also, non-commissioned officers' and other additional quarters are to be erected; quartermaster's storehouse and stables, army service barracks, cadet laundry, main and subsidiary guardhouses, post exchange, including, also, a number of minor building and general improvements auxiliary to the above mentioned structures. In the present cadet barracks, during the coming season, new plumbing, heating and electric lighting apparatus will be installed, including necessary alterations in the building in connection therewith. Steam mains and electric conducting cables will be installed from the new central heating and lighting plant and power-house for supplying existing buildings or those contemplated in the future. Capt. H. W. Stickle is Asst. Officer-in-Charge of Construction.

FORT HANCOCK, N. J.—Bids are asked until noon, April 13, by Lieut. William Paterson, Q.-M., for constructing, plumbing and wiring ordnance sto[illegible]use, employees' quarters and picket gua[illegible]se at this post. (Advertised, Engineering [illegible].)

PHILADELPHIA, PA.—We are officially **advised that JAMES G.** [illegible]K & CO. have **been awarded contract** for the erection of the **Central Branch of the** Philadelphia Y. M. **C. A., 1417-1423 Arch** St. The building will **be a 6-story structure** with basement, sub-**basement and attic, and** mezzanine floors be-**tween the first and** second floors. The build-**ing will contain a** swimming pool, gym-**nasium, concert halls,** lecture rooms, suites **of bed rooms, class** rooms, libraries and **skating rink. The** contract price is $650,-**000.**

Watson & Huckel, Archs., 1211 Walnut **St., have awarded a** contract to JACOB **MYERS & SONS for the** erection of a large **garage at 216 to 220** North Broad St., for **the Keystone Motor Car** Co. The cost will **be $150,000. The new** building will be three **stories high, of steel and** reinforced concrete, **with a front of stone** and terra cotta. It **will measure 53 × 200** ft.

PITTSBURG, PA.—Bilq[illegible] & Lee, Archs., **Stevenson Bldg., are** preparing plans for a **6-story fireproof garage** for the Standard **Automobile Co., Baum** and Beatty Sts. Cost, **$200,000. W. N. Murray** is Pres. of com**pany.**

PHILADELPHIA, PA.—It is reported that **Milligan & Webber, Arch**s., 520 Walnut St., **have prepared plans for** an 8-story bachelor **apartment house at Seve**nth St. and Wash**ington Sq. The construc**tion will be of con**crete, steel, brick and** terra cotta, with slag **roof, open plumbing,** marble, tile and mar**ble work, plate glass,** electric light fixtures, **etc. Estimated cost,** $200,000.

BALTIMORE, MD.—Bids are asked by J. **E. Sperry, Arch., Calvert** Bldg., for con**structing a Y. M. C. A.** building at Franklin **and Cathedral Sts. The** building will be of **brick, stone and terra**-cotta construction, **fireproof and eight stories** high. Estimated **cost, $500,000.**

WASHINGTON, D. C.—Bids are asked **until 3 p. m., April 12,** by James Knox **Taylor, Superv. Arch.,** Washington, for re**pairs to the east front of** the U. S. Treasury **Building. Thirty sandstone** columns which **ornament the east front** will be removed **and granite pillars will be** substituted. Es**timated cost, $350,000.**

John R. McLean, 1500 I St., N. W., has **awarded contract to the** GEORGE A. FUL**LER CO., Munsey Bldg.,** 1331 Pennsylvania **Ave., N. W., for reconstru**ction of dwelling **at corner 15th and I Sts.**, N. W., and erec**tion of a large addition.** Cost of improve**ments, about $150,000.** John Russell Pope **is Arch., 1133 Broadway,** New York.

ATLANTA, GA.—Work will soon begin on **improvements to be made** to the Atlanta **federal prison, for which** $100,000 is now **available. Between $300,000** and $400,000 **will be required to complete** all the work **contemplated. W. H. Moyer** is Warden.

MONTGOMERY, ALA.—It is reported that **the Greater University Bill,** recently passed, **includes appropriations as** follows: $400,000 **for buildings at the Univer**sity; $224,000 for **buildings at Technological** Institute, Auburn; **$200,000 for buildings at the** Girls' Industrial **School, and $50,000 for buil**dings at the Boys' **Industrial School.**

SHREVEPORT, LA. — The Continental **Bank & Trust Co., it is rep**orted, has award**er the contract to erect a** 6-story bank and **office building to HUGH** McLANNAN, of **Chicago, Ill. Estimated** cost, $175,000.

MEMPHIS, TENN.—The Memphis Ter**minal R. R. Co. is complet**ing arrangements **for construction of union** depot and ter**minals at Memphis. The** original plans call **for a main station covering** a space 200 ft. **square with a 50-ft.** platform all around; **express room 50 × 150 ft.** on the one side **and baggage room of** about same size on **other; space to be provided** in yard for 438 **coaches, together with** coach and repair **shops. About $3,000,000** will be expended **on passenger station and** $2,000,000 on ter**minals.**

NASHVILLE, TENN.—We are officially in**formed that a Y. M. C. A.** building, 90 × 100 **ft., six stories high, is to** be erected here. **The building will be of** steel, stone and **brick, fireproof. No archite**ct has been se**lected as yet. The building** will cost about **$200,000, and regular Y. M.** C. A. equipment, **to cost about $50,000, will** be installed. Wil**liam S. Frost is Gen. Secy.**

LEXINGTON, KY.—Richards, McCarty & **Bulford, Ruggery Bldg.,** Columbus, Ohio, **have completed plans and** will receive bids **until about April 5 for a** 250-room hotel for **the Phoenix Hotel Co.,** Lexington. Cost, **$300,000.**

COVINGTON, KY.—James Gilmore, Cincin**nati, Ohio, is preparing** plans for a depart**ment store and office** building for John R. **Coppen, Covington.** Estimated cost, $125,**000.**

LOUISVILLE, KY.—Bids are asked until **March 21 by the Board of** Public Works for **construction of city hall** annex. Estimated **cost, $160,000. C. A. Curtin** is Arch.; Roger **G. McGrath is Secy. Bd.** Pub. Wks.

CLEVELAND, OHIO.—The Collins Hotel **Co., present address care** Baldwin Hotel, has **been incorporated, it is** reported, and will **erect a hotel at corner** East Ninth and **Walnut Sts. The structure** will be twelve **stories high, of fireproof** construction, and **is estimated to cost about** $1,000,000. Work **of clearing the site will** be started in the **spring. J. Milton Dyer,** Arch., Cuyahoga **Bldg., has been commission**ed to prepare the **plans.**

Bids were received March 7 at the office **of the Supervising Archite**ct of the Treasury, **Washington, D. C., for** the construction of **the custom house and** court-house, Cleve**land, Ohio. Bids were:** John Gill & Sons, **Cleveland, $1,382,921, 24** months; Reaugh **Construction Co., Clevela**nd, $1,400,000, [illegible] **months.**

Richards, McCarty & Bulford, Ruggery **Bldg., Columbus, are revis**ing the plans and **will be ready for new** bids after March 15 **for a wholesale grocery** warehouse, to be erected at Cleveland, for Eldridge-Higgins Co. Estimated cost, $200,000.

A commercial structure about twelve stories in height and costing $1,000,000 is to be erected shortly on the south side of Euclid Ave. by A. A. Pope, Pres. of the National Malleable Castings Co. The structure will be located on a lot a little east of East 12th St., and extending from Huron Road to Euclid Ave. The Euclid Ave. frontage of the property is 100 ft.

DETROIT, MICH.—Widmann, Walsh & Boisselier, Archs, Wainwright Bldg., St. Louis, Mo., are preparing plans for a storage house to be built at Detroit for the Anheuser-Busch Brewing Association, St. Louis. Estimated cost, $500,000.

BAY CITY, MICH.—The Hotel Building Co. has been organized here with a capital stock of $200,000, $80,000 of which was subscribed. The company proposes to build a hotel on the site of the Fraser House, destroyed by fire several months ago. The building will be 220 × 150 ft., covering a block front on Center Ave., four stories in height and will contain 150 rooms. An auditorium is contemplated in connection.

DETROIT, MICH.—It is reported that Albert Kahn, Arch., 1117 Union Trust Bldg., is preparing plans and will be ready about the middle of March to take figures for a business block for Grinnell Brothers, 219-223 Woodward Ave. The structure is to be 6-story and basement, 60 × 100 ft., to contain stores, auditorium, studios and offices. The construction will be of pressed brick, Bedford limestone, structural steel, with composition roof, plate and art glass, steam heating, electric lighting, open plumbing, electric passenger elevator, marble and tile, hardwood finish, hard plaster, etc. Estimated cost, $150,000.

NORTH CHICAGO, ILL.—The Bureau of Navigation, Navy Dept., Washington, has postponed from April 1, at 12 m., to May 1, at the same hour, the opening of bids for the construction of buildings for the naval training station, Great Lakes, North Chicago, Ill. Noted on Feb. 21.

CHICAGO, ILL.—J. C. Llewellyn, First National Bank Bldg., 164 Dearborn St., is preparing plans for a warehouse to be built on the south side of Washington St., 120 ft. west of Desplaines St., for the H. M. Hooker Co., 59 West Randolph St., dealers in paint, glass, etc. It will be six stories or more, 126 × 183 ft., of reinforced concrete construction, with concrete foundation, have pressed brick front, steam heat, wiring for electric light, the latest improvements, and will cost $150,000 to $200,000.

MILWAUKEE, WIS.—Announcement has been made that the new terminal station of the Chicago & Milwaukee Electric R. R. Co., to be built at Second and Wells St., will cost $200,000. R. B. Stearns, Highwood, is Gen. Mgr.

SIOUX CITY, IOWA.—Marshall & Fox, First National Bank Bldg., Chicago, Ill., will let contract shortly, it is reported, for construction of an office building to be built at Sixth and Pierce Sts., Sioux City, for M. Gordon and associates. The building will be 150 × 150 ft., three stories high, and will cost $175,000.

KANSAS CITY, MO.—Sheppard & Farrar, Minor Bldg., are preparing plans and will take bids for a church, 55 × 96 ft., to be erected at Admiral and Independence Boulevards, for the First Congregational Society, 1837 Pendleton Ave. The building will be constructed of stone with hard plaster, combination light fixtures, nickel plumbing, etc. Estimated cost, $125,000.

Howe, Hoit & Cutler, Archs., 313 East Tenth St., are preparing plans for a 4-story office building, 58 × 142 ft., for the United States and America Mexican Trust Co., E. E. Holmes, Mgr., at Tenth and Baltimore Sts. Estimated cost, $175,000.

ST. LOUIS, MO.—William B. Ittner, Arch., has prepared plans for a school building for the Board of Education, to cost $180,000.

Plans for a brick, stone and terra-cotta building are being prepared by E. Ross Chamblin, 1914 Holland Bldg., St. Louis, for Gilbert C. Goodlett, 1005 Chestnut St., and others. The building will be erected at Clara Ave. and Delmar Boulevard; it will have three stories, and will contain 40 apartments. Estimated cost, $300,000.

The work of excavation has begun at the corner of Seventh and Market Sts. preparatory to erection of the American theater and hotel. It is the intention of the managers to push the work to completion in time to have the theater ready to open for first week in October. The building is to be a 12-story structure, fronting 127 ft. on Market St. and 120 ft. on Seventh. It will be erected of white material. It will be built by the Southern Realty & Financial Co., and was designed by F. C. Bonsack, Columbia Bldg.

CHICKASHA, IND. T.—A $200,000 opera house and hotel will be erected here by W. J. Croslen. The building will be a fireproof 5-story structure.

SEATTLE, WASH.—We are officially advised that plans have been completed for a 6-story fireproof building, 120 × 120 ft., for Sam Rosenberg. The structure will be of reinforced concrete construction, with terra-cotta trimmings, and it will have a roof garden. Bids will be received in the spring. Cost of building, $265,000; equipment, $40,000. Spear & Co., Oriental Bldg., Seattle, are Archs.

Graham & Myers, Globe Block, Seattle, inform us that LYMAASEN & LANDO have secured general contract for constructing a 4-story apartment house on East Union St., between 13th and 14th Aves., for Meacham & Vansant. F. H. PHELPS has contract for heating, and JOHN CONNELL has contract for plumbing. Estimated cost, $200,000.

PORTLAND, ORE.—Plans are being drawn by Whidden & Lewis, Concord Bldg., for a 5-story apartment house for Mrs. T. W. Spencer, to cost $125,000. It will be of brick and steel construction.

PORTLAND, ORE.—The CONTRACTING ENGINEERING CO., Fenton Bldg., Portland, has secured the contract for erection of the Board of Trade Building, corner of Fourth and Oak Sts. The building is to be 100 × 100 ft., eleven stories in height, and will be built entirely of reinforced concrete.

LOS ANGELES, CAL.—The Standard Investment Co. will erect a reinforced concrete building on the site now occupied by the Long Beach Rink, Locust Ave. Plans are now being prepared, and it is estimated that the structure will cost $200,000.

SAN FRANCISCO, CAL.—We are officially advised that the Wells-Fargo Express Co., 51 Broadway, New York, N. Y., has applied for a permit to reconstruct its reinforced concrete stable on the south side of Folsom St., west of Second, to cost $178,000. No contracts have been let as yet. Meyers & Ward, Kohl Bldg., San Francisco, are Archs.

Hyman Bros. Co. has applied for a permit for a 3-story reinforced concrete rooming-house, to be located on the west side of Third St., between Mission and Market Sts., and to cost $152,000.

Trowbridge & Livingston, 424 Fifth Ave., New York, have completed plans for the new Palace Hotel. The lower story is to be of stone, probably gray in color, and the upper stories will be of buff-colored brick. The structure will be nine stories and basement.

SAN FRANCISCO, CAL.—A permit has been applied for by Jeremiah Lynch to erect a 5-story building on the corner of Bush St. and Clara Lane, to cost $125,000.

D. H. Burnham & Co., 9 Jackson Boulevard, Chicago, Ill., have completed plans for a bank and office building to be erected at San Francisco, for the First National Bank. It is to be twelve stories high, 75 × 160 ft., built of granite and pressed brick, with tar and gravel roof, plate glass, oak and mahogany finish, iron fire escape, window guards and store fronts, combination light fixtures and nickel plumbing. Cost, about $900,000. Bids will be received by Willis Polk, Merchants' Exchange Bldg., San Francisco, Cal., local representative of architects.

The new building for the Y. M. C. A. is to be erected on the site of the destroyed structure at the corner of Mason and Ellis Sts. McDougall Bros., 727 Devisadero St., are Archs. The building will cover the entire lot, 87.6 on Ellis St. by 187.6 on Mason St. It will contain three stores fronting on Ellis St. Aside from this the entire building will be devoted to the work of the institution. It will contain accommodations for 5,000 members, and the boys' department will have accommodations for 3,000 members. The gymnasium will occupy two floors on the Mason St. side and will be located on the sixth story of the building. There will be a swimming tank 75 × 30 ft. The building will contain nearly 200 rooms for dormitories.

SACRAMENTO, CAL.—The citizens have voted favorably a $300,000 bond issue, the proceeds to be used for erecting a city hall. M. J. Desmond is City Clerk.

RENO, NEV.—The Washoe County Commissioners plan to build a court-house to cost at least $200,000. It has been decided that a new court-house is needed and the Commissioners are arranging to bond the county for $200,000 in order to build the structure.

TORONTO, ONT.—The Confederation Life Assurance Co. has purchased a site at the corner of Queen and Victoria Sts., upon which it will erect a 7-story brick, stone and steel office building. J. K. Macdonald, Toronto, is Managing Dir.

WINNIPEG, MAN.—A. & W. Melville, Archs., Union Bank Bldg., Winnipeg, are preparing plans for an apartment block to cost $300,000, which will be erected at Broadway and Hargrave Sts. It will contain 100 suites, will be built of pressed brick and stone, will be four stories high and 130 × 197 ft.

EDMONTON, ALTA.—Johnson & Lines, Edmonton, have been selected to prepare plans for the proposed civic hospital, which will cost $150,000.

A permit for erection of new post-office in this city was lately granted. The building will be erected at the corner of Dougal and Rice Sts., and will cost $250,000. Fred. Gelinas, Ottawa, Ont., is Secy., Dept. of Public Works.

REGINA, SASK.—Darling & Pearson, Archs., Winnipeg and Regina, have received instructions from the Provincial Department of Public Works to prepare plans for a new land titles office to cost $100,000. F. J. Robinson is Comr. of Works.

WATER SUPPLY—IRRIGATION.

The names of parties awarded contracts are printed in capital letters.

MELROSE, MASS.—See under Sewerage.

SPRINGFIELD, MASS.—The Board of Water Commissioners recently awarded contract for supplying c-i pipe to be used in reconstructing the distributing system to FRED. A. HOUDLETTE & SON, 93 Broad St., Boston, at $76,995. The U. S. Cast-Iron Pipe & Foundry Co., Land Title Bldg., Philadelphia, bid $17,484. R. F. Wood & Co., 400 Chestnut St., Philadelphia, were about $4,000 higher. E. E. Lochridge is Engr. Water Dept.

PORT JERVIS, N. Y.—The Erie R. R. Co. may construct plant to supply water from either Neversink or Delaware River for general purposes of the company in Port Jervis. J. T. Tiffany, at Jersey City, N. J., is Div. Engr.

PHELPS, N. Y.—The Board of Village Trustees will hold a meeting March 19 to vote upon question of repairing water system.

YONKERS, N. Y.—Bids are asked by the Board of Water Commissioners, A. W. Kingsbury, Clk., until 8 p. m., April 4, for constructing water filtration plant, consisting of two covered masonry sand filters and appurtenances. For approximate quantities of work see advertisement. Hazen & Whipple, St. Paul Bldg., New York, are Consult. Engrs. (Advertised, Engineering News.)

McKEESPORT, PA.—Bids are asked by C. E. Soles, City Controller, until 2 p. m., April 16, for (A) laying 8, 12, 20, 24 and 30-in. mains, including intake line; (B) mechanical filtration plant and building of 6,000,000 gallons daily capacity; (C) water softening plant and building of 10,000,000 gallons daily capacity; (D) chemical storage building; (E) one 400-HP. boiler; (F) two 7,000,000 low lift centrifugal pumping engines, five smaller pumps, two water meters; and (G) elevator. Alexander Potter is Ch. Engr. (Advertised, Engineering News.)

WHEELING, W. VA.—The city is considering installation of pump of about 20,000,000 gallons capacity and filtration and sedimentation plant at water-works near Slacktown. Charles B. Cooke is City Engr.

ATLANTA, GA.—Bids are asked by the Board of Water Commissioners, Park Woodward, Gen. Mgr., until 4 p. m., April 10, for furnishing c-i pipe and specials. See advertisement for quantities. (Advertised, Engineering News.)

THOMASTON, ALA.—The city will construct water-works system.

McHENRY, MISS.—Franchise has been granted to R. M. Bond to lay mains and pipes along the streets, furnishing the town with water, the supply to be obtained from a spring near McHenry.

PORT CLINTON, OHIO.—Bids are asked by the Ohio National Guard for constructing water supply and sewerage system, including water and sewerage purification, for Camp Perry, four miles west of Port Clinton. The principal items in the specifications are 600 yds. concrete, 3,000 yds. excavation, 3,000 ft. of 8 and 10-in. sewers, 2,000 ft. of 6-in. water pipe and pumping station. Work to be completed by June 15. Col. Edward T. Miller, at State House, Columbus, Ohio, has plans and specifications.

TOLEDO, OHIO.—The Board of Public Service has awarded contract to the TOLEDO BOILER WORKS CO., at $13,863, for installing 800 HP. boiler, with Roney smoke consumers, at the water-works pumping station. Frank I. Consaul is Ch. Engr. Bd. Pub. Service.

ROCKPORT, IND.—It is reported that the county is to construct a 10-mile canal to drain Willow Pond district, in Luce Township.

GREENFIELD, IND.—Bids are asked by the County Commissioners until 2 p. m., March 29, for furnishing materials and constructing tile ditch 5,960 ft. in length. O. H. Monger is Grain Comr.

HAMTRAMCK, MICH.—The legislature has granted permission to the City Council to extend the water system.

JOLIET, ILL.—ROBERT D. HANNON has been awarded contract for improving Hunter Ave., from McDonough St. to Jasker St., by constructing a water main. Hubert A. Stevens is City Engr.

ALMA CENTER, WIS.—Bids are asked by J. T. Duxbury, Village Clk., until 7.30 p. m., March 29, for furnishing materials and constructing water-works plant consisting of the following items: 93 tons of 4, 6 and 8-in. c-i. pipe; 4,870 lbs. of special castings; 13 4, 6 and 8-in. valves; twelve hydrants; laying 5,835 lin. ft. of c-i. pipe; furnishing and erecting 30,000-gallon steel tank upon 30-ft. masonry tower; furnishing 16 HP. gasoline engine and 200-gallon triplet pump; drilling 8-in. well 400 ft. deep and constructing brick power-house. W. G. Kirchhoffer, at Madison, Wis., is Engr. (Advertised, Engineering News.)

BLOOMER, WIS.—The city may construct water-works system.

MILWAUKEE, WIS.—The Board of Public Works has let contract for furnishing pipe for water during the present year to the UNITED STATES CAST-IRON PIPE & FOUNDRY CO., Land Title Bldg., Philadelphia, Pa. The price for the 8, 12 and 16-in. pipe is $37 per ton. EDWARD O'DONNELL received contract for laying all of the pipe, with the exception of 12-in., which will be laid by GEORGE E. ZIMMERMAN. The prices for laying varies from 29 to 48 cts. The contract for hauling the material was let to B. WELCH. Charles G. Poetsch is City Engr.

LAMONT, IOWA.—Water-works system may be constructed.

FOREST CITY, IOWA.—Bids are asked by the Boards of Supervisors of Winnebago and Worth Counties, until March 21, for constructing open ditches in proposed Drainage Improvement, known in Winnebago County as Drainage District No. 2 and in Worth County as Drainage District No 3. Iver Iverson, Jr., is Worth County Audr. J. L. Nelson is Winnebago County Audr.

EMMETSBURG, IOWA.—Bids are asked by the Board of County Supervisors until 1 p. m., April 4, for constructing drainage district No. 6. Section 1 will consist of laying and covering 1,450 ft. of 10-in. tile, and furnishing material therefor. Section 2 will consist of excavating open ditch and removal of about 52,700 cu. yds. of earth. Work will be commenced not later than June 1, and to be completed not later than Dec. 31.

Bids also are asked at the same time for constructing drainage district No. 7. Section 1 will consist of constructing an open ditch and in excavation of 52,900 cu. yds. of earth. Section 2 will consist of laying and covering 2,950 ft. of 12-in. tile, and 1,050 ft. of 10-in. tile, and furnishing material therefor. Section 3, being lateral No. 2, requires construction of open ditch and excavation of 2,000 cu. yds. of earth. Section 4, being lateral No. 3, requires laying and covering 3,000 ft. of 12-in. tile and 2,100 ft. of 10-in. tile, and furnishing material therefor. Work to be commenced not later than June 1, and completed not later than Dec. 31.

Bids also are asked at the same time for constructing drainage district No. 11. Section 1 will consist of laying and covering 2,000 ft. of 16-in. tile, 1,500 ft. of 15-in. tile, 1,400 ft. of 12-in. tile, 1,400 ft. of 10-in. tile, and furnishing material therefor. Section 2 will consist of laying and covering 4,000 ft. of 24-in. tile and furnishing material therefor. Section 3 will consist of excavating open ditch and removal of about 4,400 cu. yds. of earth. Section 4 will consist of laying and covering 900 ft. of 10-in. tile and furnishing material therefor. Said work to be commenced not later than June 1, and to be completed not later than Dec. 31.

Bids also are asked at the same time for constructing drainage district No. 14. Section 1 will consist of laying and covering 5,900 ft. of 18-in. tile, 350 ft. of 15-in. tile, 2,550 ft. of 10-in. tile, 1,500 ft. of 8-in. tile, and furnishing material therefor. Section 2 will consist of laying and covering 500 ft. of 6-in. tile, 1,150 ft. of 5-in. tile, and furnishing material therefor. Section 3 will consist of laying and covering 1,450 ft. of 6-in. tile and furnishing material therefor. Section 4 will consist of laying and covering 1,100 ft. of 10-in. tile and furnishing material therefor. Section 5 will consist of laying and covering 960 ft. of 6-in. tile and furnishing material therefor. Section 6 will consist of laying and covering 1,300 ft. of 12-in. tile, 700 ft. of 10-in. tile, 1,300 ft. of 8-in. tile, and furnishing material therefor. Section 7 will consist of laying and covering 1,250 ft. of 5-in. tile and furnishing material therefor. Work to be commenced not later than June 1, and to be completed not later than Dec. 31. Sim R. Stedman is County Audr.

BROWERSVILLE, MINN.—The question of constructing water-works system is being considered.

ALBERT LEA, MINN.—Bids are asked until 10 a. m., April 4, by C. E. Brainerd, County Audr., for construction of main ditch and laterals of Judicial Ditch No. 1. The work comprises 17.7 miles of main ditch and 15.3 miles of lateral ditches. Estimated excavation, 1,739,779 cu. yds., at estimated cost of $163,364. J. W. Dappert is Engr., Taylorville, Ill. F. H. Fisk, Albert Lea, is Asst. Engr. (Advertised, Engineering News.)

HASTINGS, MINN.—The City Council has awarded contract for construction of water-works and sewers to WILLIAM TUNNY, of Joliet, Ill., at $33,694.

BRECKINRIDGE, MINN.—Bids will soon be asked for dredging Ditch No. 6. Martin Aalberg, at Henning, Minn., is Engr. R. P. Glover is County Audr. Estimated cost, $26,000. There will be about 219,000 cu. yds. of earth excavation.

BELLEVILLE, KAN.—The Belleville Deep Water Co., of Belleville, is preparing plans and specifications for building pipe line from the American Bottoms.

FRONTENAC, KAN.—W. C. SWANWICK, of Joplin, Mo., has been awarded contract for construction of water-works system. H. G. Whiteleather is City Clk.

CRAWFORD, NEB.—We are officially advised that the following bids were received Feb. 27 by the U. S. Reclamation Service for constructing Pathfinder Dike, North Platte Project: Hubbard & Carlson, Boise, Idaho, $293,935; Gaddis & Surle Stone Co., 611 Continental Bldg., Denver, Colo., $244,875, and James O'Connor, Mitchell, Neb., $244,460.

PERU, NEB.—Bids are asked by T. J. Majors, Secy. Bd. of Superv., Peru Bottom Drainage District No. 1, until March 20, for construction of drainage ditches, dykes and other improvements for drainage of lands within District No. 1.

WILLISTON, N. DAK.—We are officially advised that the following bids were received March 5, by the U. S. Reclamation Service, for constructing canals and ditches in connection with the Buford-Trenton Project: John S. Penson, Williston, N. Dak., Divisions "A" and "C," $37,483; John S. Penson & D. F. King, Williston, N. D., Division "A," $20,868; and James Burden, Delhi, Iowa, Division "C," $13,283. Itemized bids will be given next week under Contract Prices.

BILLINGS, MONT.—Authority has been granted the Reclamation Service to prosecute the work involved in construction of structures for division 1, main canal, Shoshone Irrigation Project, Wyo., by force account. About 180,000 cu. yds. of grading will be required, 1,800 cu. yds. of concrete, and 127,000 lbs. of steel reinforcing bars and other incidental work. Proposals for this work were opened Aug. 23, 1906, and the lowest bid received was considered too high and was rejected. Further effort was made to secure proposals and circular letters were sent out announcing that bids would be received up to Feb. 1, but no response was made. It is necessary to complete this work during the coming field season and the Secretary of the Interior has accordingly authorized the Reclamation Service to proceed with the work. Estimated cost, $36,000.

ROLLA, MO.—The ELECTRIC & STEAM ENGINEERING CO., of St. Louis, Mo., has been awarded contract for constructing water-works, at $36,063.

DE QUEEN, ARK.—Water-works system may be constructed.

LAKE VILLAGE, ARK.—At a recent meeting of the City Council it was decided to establish an improvement district for erection of water-works and eletric light plant. The water will probably be taken from Campbell Spring, on Crow Mountain, about 400 ft. above Russellville.

RUSSELLVILLE, ARK.—The legislature has passed a bill providing for the erection and operating of municipal water-works. Richard M. Newport, William M. Swilling, William P. Ferguson, J. F. Sauerman and Oscar H. Wilson constitute the Board of Improvement.

MEMPHIS, TEX.—The city will spend $28,000 constructing water-works. One 16 × 50 stand-pipe and ten miles of mains will be constructed. S. D. Miller, at Amarillo, Tex., is Consult. Engr.

MEMPHIS, TEX.—Plans are being prepared for constructing water-works.

PALACIOS, TEX. — Water-works system may be constructed.

PORT ARTHUR, TEX.—Bids are asked by the Port Arthur Water Co., George M. Craig, Pres., until March 18, for laying approximately 2,740 ft. of 4-in. and 1,675 ft. of 6-in. c.-i. water main.

SKIATOOK, IND. T.—Water-works system may soon be installed.

AULT, COLO.—Bids are being received by the City Council for constructing water-works. O. S. Shattuck, at Greeley, Colo., is Engr.

ANDERSON, CAL.—A large water-storage dam is to be constructed at lower end of McComber flat, on upper Battle Creek, in the Shingletown country, by the Northern California Power Co. The water will cover an area of 500 aeres in its confinement. The object of the company is to have a reserve supply on hand when Battle Creek at this point becomes low during the latter part of the summer and cannot supply sufficient water for the use of the electrical generating plant at Volta. This dam has no association with the one they are contemplating building on Battle Creek for new 12,000-HP. generating plant.

GLENDALE, UTAH.—The Glendale Water System Co., of Glendale, has been formed by James Smith and associates to construct water-works.

MILLVILLE, UTAH.—The Millville Water Works Co., of Millville, has been organized with capital stock of $100,000. E. N. Hammond is Pres.

GRAND FALLS, N. B.—A system of water-works will be installed. Estimated cost, $20,000.

SUMMERSIDE, P. E. I.—Bids will be asked about last of April for installing water-works and sewerage system. Estimated cost, $100,000. V. H. Dupont, at Montreal, Que., is Engr.

NEW LISKEARD, ONT.—Bids are asked by Sinclair & Smith, Engrs., New Liskeard, until noon, March 16, for constructing water-works system. The work is as follows: A.—Furnishing all cast-iron pipe and accessories f. o. b. cars New Liskeard, Ont. B.—Furnishing all wood stave pipe and accessories f. o. b. cars New Liskeard, Ont. C.—Hauling and laying all cast-iron and wood stave pipe, approximately 25,000 ft., ranging from 4 to 14-in. in diameter; doing all excavating and back filling; setting all hydrants, valves and specials, and constructing valve chambers. D.—Furnishing and erecting steel stand-pipe 21 ft. in diameter and 55 ft. high. E.—Protecting and developing springs on Lot 1, Concession 2, Township of Harris, and constructing receiving basin. F.—Furnishing all material and labor for the construction of: 1.—Concrete block pumping station with concrete foundation; concrete foundations for pumps and motors and also concrete receiving well at pumping station. 2.—Concrete foundation for steel standpipe with necessary clearing, excavating and grading. G.—Furnishing and erecting two 100-HP. 3-phase, 60-cycle, 2,200-volt motors with all necessary accessories in pumping station. Alternative propositions will be received as follows: 1.—Each motor to be direct connected to multi-stage turbine pump, each having capacity of 600 imperial gallons per minute against head of 325 ft. 2.—Each motor to be connected by endless chain to double-acting vertical triplex power pump, each pump having capacity of 600 imperial gallons per minute against head of 325 ft. H.—Furnishing and erecting two pumps each having capacity of 600 imperial gallons per minute against head of 325 ft. Alternative propositions will be received on the following: 1.—Two multi-stage turbine pumps direct connected to motors as described in Contract (G). 2.—Two double-acting vertical triplex power pumps connected by an endless chain to motors as described in Contract (G).

BERLIN, ONT.—An air compressor plant having daily capacity of 2,000,000 gallons will be installed. Estimated cost, $7,000.

MOOSE JAW, SASK.—A gravity water supply system will be installed. Estimated cost, $90,000.

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

BOSTON, MASS.—Bids are asked by the Metropolitan Water and Sewerage Board, William N. Davenport, Secy., until 2.30 p. m., April 5, for constructing earth tunnel, part of Section 83 of extension of high level sewer, South Metropolitan System, in Winchester St., near Fuller St., westerly through Winchester St., beyond Thorndike St., thence in private land to near Columbia St., Brookline. Some particulars are estimated to be as follows: Length, 800 ft.; inside diameter of sewer, 69x72 ins.; 50 cu. yds. of Portland brick masonry and 1,200 cu. yds. of concrete masonry in tunnel. The invert of tunnel is from 28 to 54 ft. below street surfaces. William M. Brown is Ch. Engr. Sewerage Works. (Advertised, Engineering News.)

MILFORD, MASS.—The following bids were received Feb. 26, for constructing of (a) Sect. 3 of sewer system, including all high level sewers in the business district; (b) Sect. 4, including the Fruit St. Dist.: J. E. Palmer, Boston, (a) $21,787, (b) $20,493; C. E. Trumbull Co., Boston, (a) $20,568; Cenidella Bros., Milford, (a) $19,849, (b) $17,503; BRUNO, SALAMONE & PETITTI, (a) $19,000, (b) $17,501 (awarded contract).

MELROSE, MASS.—Bids are asked by the Dept. of Public Works until noon, March 26, for furnishing sewer pipe, castings, brick, curb stone and flagging, lead and lead pipe, gates, valves and hydrants. For estimated quantities required, see advertisement. George O. W. Servis is Engr. and Supt. Pub. Wks. (Advertised, Engineering News.)

NEW HAVEN, CONN.—Bids are asked until 2 p. m., March 18, for furnishing and delivering blue stone curb, etc., cobble stone, cement, vitrified sewer pipe, granite catch-basin stone, Belgian blocks, and Georgia pine required by Department of Public Works for the period of one year. C. W. Kelly is City Engr.

ITHACA, N. Y.—Bids are asked by the Board of Sewer Commissioners, H. L. Stewart, Supt., until 8 p. m., April 4, for furnishing material and constructing reinforced concrete septic tank, in connection with sewerage system. The work involves about 1,100 cu. yds. of concrete, with piping, valves, etc. (Advertised, Engineering News.)

WHITE PLAINS, N. Y.—Plans, specifications and bidding sheets for constructing four sections of Bronx Valley sewer, are on file at office of Engineering News, New York. Bids are asked until March 20. Frank N. Glover is Secy. Bronx Valley Sewer Commission. (Advertised, Engineering News.)

WESTERLEIGH (West New Brighton, S. I., post-office), N. Y.—Bids are asked by the National Prohibition Park Co., until April 1, for laying about 3,500 ft. of sewer mains in streets in Westerleigh, S. I. Plans and profile can be seen at office of National Prohibition Park Co., Westerleigh, S. I. (Advertised, Engineering News.)

ALBANY, N. Y.—Bids are asked by the Board of Contract and Supply until 3 p. m., March 18, for laying vitrified stoneware sewer under south sidewalk of Livingston Ave., between west line of Thornton St. and sewer in Judson St., and also vitrified stoneware sewers under each sidewalk of Lancaster St., between Swan St. and Willett St. The work in each case includes necessary bends, branches, house connections, manholes and other appurtenances. Walter Melius is City Engr. Isidore Wachsman is Clk. Bd. of Contract and Supply.

ITHACA, N. Y.—The Board of Sewer Commissioners March 5 decided to build septic tank for sewer system. The cost of the tank will be about $16,000 and the proposed improvement complete will be paid for by bonds still on hand. The proposed site of the septic tank will be in lower part of the city at foot of Fall Creek.

SCHENECTADY, N. Y.—The Board of Contract and Supply has awarded contract for constructing sanitary sewers in portions of Albany St. and Duane and Kelton Aves. to BECKWITH BROS., at approximately $15,000. Kellam & Shafer bid $20,000, and Joseph Clements & Son bid $53,000.

WEEHAWKEN, N. J.—Bids are asked by the Township Committee until 8 p. m., March 18, for reconstructing portion of 18th St. sewer. Thomas Carroll is Township Clk.

JERSEY CITY, N. J.—Bids are asked by the Board of Street and Water Commissioners until 2 p. m., March 18, for constructing sewer in Miller St. George T. Bouton is Clk.

KEARNEY (Arlington post-office), N. J.—A. E. Sargent is reported to have secured contract for constructing Maple St. sewer at $5,064.

PERTH AMBOY, N. J.—An ordinance has been approved by A. Bollschweiler, Mayor, for constructing 15-in. pipe sewer with house connections and manholes in Jefferson St. from west side of New Brunswick Ave. to connect with sewer in Madison Ave. Forrest L. Smith is City Engr.

TRENTON, N. J.—The contracts for constructing sewers No. 360, in Ferrier Ave., and No. 356, in Girard Ave., from Courtland St. to St. Joes Ave., have been awarded by the Common Council to ROSS & BOSCOVELLI. Abram Swan, Jr., is City Engr.

WEST NEW YORK (Weehawken post-office), N. J.—HENRY & EMMER have been awarded contract to lay sewer through Dewey Ave. and the northeastern section of the town, at $24,480. JOSEPH ROSETTI has contract for constructing sewer in Adam St.

ALLEGHENY, PA.—THOMAS CRONIN & CO. have been awarded contract for constructing Marshall Ave. sewer, at $5,000. The contract for constructing McIntyre Ave. sewer has been awarded to WILLIAM C. FISHBURN & CO., at $3,000. Edward J. McIlvain is Dir. Pub. Wks.

WILKINSBURG (Pittsburg post-office), PA.—The question of constructing sewerage system is reported under consideration.

WILMINGTON, DEL. — The Street and Sewer Directors have ordered sewers constructed in portions of 6th and 15th Sts. Alexander J. Taylor is Engr. Sewer Dept.

WASHINGTON, D. C.—The following bids were received March 4, by the District Commissioners, for construction of sewers in the District, based on (a) ordinary excavation; (b) red brick masonry; (c) vitrified brick masonry; (d) concrete masonry; (e) concrete masonry; (f) 6-in. pipe: R. J. Beall Construction Co., 1215 F St., N. W., Washington, D. C., (a) $2.50; (b) $18; (c) $25; (d) $9.45; (e) $9.20; (f) 30 cts. Wm. F. Brenizer, Washington, D. C., (a) $1.85; (b) $14; (c) $24; (d) $9.40; (e) $9; (f) 30 cts. E. G. Gummell, Eckington, D. C., (a) $7; (b) $30; (c) $40; (d) $15; (e) $14; (f) $1.

PARKERSBURG, W. VA.—Bids are asked by the Board of Affairs, until 8 p. m., April 11, for furnishing material and constructing two ring brick storm sewer, six ft. in diameter, beginning at or near center of Plum St. and extending a distance of about 800 ft. Frank Good is Audr. (Advertised, Engineering News.)

CHARLESTON, W. VA.—C. T. McCRACKIN & CO., 214 Schultz Bldg., Columbus, Ohio, has been awarded contract for constructing sewers, at $174,032, wtihout time. W. A. Hogue is City Engr.

KNOXVILLE, TENN.—Bids are being received for constructing sewers in various streets. W. C. Crozer is City Engr.

PORT CLINTON, OHIO.—See under Water Supply—Irrigation.

DELAWARE, OHIO.—P. DRAKE & SONS, of Marion, Ohio, have been awarded contract for constructing sanitary sewers in East Winter, Estelle and Lake Sts. and Central Ave., at $3,385.

EVANSVILLE, IND.—Bids are asked by the Board of Public Works, until March 23, for construction of sewers in First Ave., in alley between Jefferson and Madison Aves., and in Walnut St.

Bids also are asked at the same time for construction of main sewer on Walnut St., from Orr Ave. to Kentucky Ave. and local 24-in. sewer pipe drain from Florida St. to First Ave. bridge.

Plans have been prepared by James D. Saunder, City Engr., for construction of sewer from Bee slough through Cass, Garvin, Monroe, Kentucky and Bell Aves., and bids will be received by the Board of Public Works for its construction. The sewer will be 6½ × 8½ ft. diminishing to 4 × 5 at the source. Estimated cost, $176,000.

FRANKFORT, IND.—The FRANKFORT CONSTRUCTION CO. has been awarded contract for constructing sewer. Otto Wolf is Deputy City Clk.

MOORESVILLE, IND.—Bids are asked by the Town Board, until March 19, for constructing five miles of 8, 10 and 12-in. sewers. Estimated cost, $17,000.

PERU, IND.—The City Council has ordered city engineer to prepare plans and specifications for construction of sewer in Main St., from Water to Denton Sts.

RICHMOND, IND.—Bids will soon be asked for constructing about 3,000 ft. of concrete piping trunk sewer and six vitrified tile pipe laterals. Estimated cost, $50,000. Fred Charles is City Engr.

SOUTH BEND, IND.—Bids are asked until March 19 by the Board of Public Works, for constructing 4,800 ft. of pipe sewer. A. J. Hammond is City Engr.

ECORSE, MICH. — Authority has been granted the village to construct sewers.

METROPOLIS, ILL.—The Public Improvement Commissioner is urging construction of sewers.

LITCHFIELD, ILL.—M. R. HAM, of Litchfield, has been awarded contract for constructing trunk sewer.

QUINCY, ILL.—The Board of Public Works has let contract to JOHN FIFE, of Quincy, for constructing sewers. F. L. Hancock is City Engr.

DES MOINES, IOWA.—The Board of Public Works has awarded contract for constructing first section of Grand View sewer system to the CHRISTIE CONSTRUCTION CO., at $2.15 per lin. ft., totaling about $21,000. George D. Dobson is City Engr.

PIERRE, S. DAK.—Plans have been completed by Edward K, Mather, City Engr., for constructing sewerage system. The plans call for 8 to 24-in. vitrified or cement pipe, and concrete trunk sewer 5 ft. 6 in. × 3 ft. 8 in. Bids will soon be asked for constructing this system, and also for grading various streets.

ST. JOSEPH, MO.—RACKLIFFE & GIBSON, of this city, have been awarded contract for constructing sewers. W. H. Floyd, Jr., is City Engr.

ENNIS, TEX.—The city will grant franchise for installation of sewerage system. W. E. Chapman is Chn. of Com.

TAYLOR, TEX.—The citizens of Taylor have entered into contract with J. M. Hamilton, of Hamilton Construction Co., of Chicago, for constructing sewerage system in Taylor. Cost, $35,000. The citizens to subscribe $7,000 of preferred stock of the company, to be incorporated and known as the Taylor Sanitary Construction Co.

SPOKANE, WASH.—The Board of Public Works has awarded contracts for constructing sewers in McClellan St. and Fourth Ave. to JOHN FIFE, at $4,534. Charles McIntyre is City Engr.

BERKELEY, CAL.—The Trustees have made arrangements for installation of storm sewer system for northern, central and southern sections of the college town. The sewers, which will run from the foothills to the bay, will cost about $350,000. C. L. Huggins is City Engr.

OAKLAND, CAL.—The Board of Public Works has awarded contracts for constructing sewers as follows: Cemetery Creek sewer, to MICHAEL MURPHY, $6,208; Broadway, 42d and Diamond St. sewers, to JAMES STANLEY, $14,462; Fourth Ave. sewer, to COTTON BROS. & CO., $14,892. The bids for two sewers in Second St. were far in excess of the estimates of City Engineer, Turner and were referred to the City Engineer.

PUEBLO, COLO.—CAHILL & RYAN, of this city, have been awarded contract for laying 18-in. sewer. A. E. McIntosh is City Engr.

CALGARY, ALTA.—The ratepayers will vote on a bylaw to raise $195,000 for sewer construction, which includes $75,000 for trunk sewer. F. W. Thorold is City Engr.

GARBAGE DISPOSAL.

The names of parties awarded contracts are printed in capital letters.

ROCHESTER, N. Y.—The contract for constructing reduction plant has been let to J. J. A. FRIEDREICHS, at about $70,000. Plant to be completed about June 1. Edwin A. Fisher is City Engr.

SCHENECTADY, N. Y.—The matter of garbage disposal is being taken up by Special Committee appointed by the Mayor, and their report will soon be submitted to the Common Council, advising letting contracts for a 5-year term. The disposal to be either by incinerating or reduction process; the method to be decided by the company receiving contract. The contract will simply require collection and sanitary disposal of ashes, rubbish, garbage and dead animals in any way which the committee believes to be the cheapest method. L. B. Sebring is City Engr.

HARRISON (Newark post-office), N. J.—The Town Council has awarded contract to JOHN PENZLACK, at $8,350, for doing scavenger work for period of three years.

BENWOOD, W. VA.—The city may soon decide to construct crematory.

MEMPHIS, TENN.—The Memphis Sanitary Co. has been incorporated with capital of $25,000, by D. M. Scales and associates, to establish garbage reduction plant. The system of Capt. F. G. Wiselogel, of Indianapolis, Ind., will probably be established.

CLEVELAND, OHIO.—STEPHEN PRATT, of Detroit, Mich., has been awarded contract to furnish six digesters and appurtenances for the Cleveland Garbage Disposal Plant, at $469.69 each, the digesters to be [illegible]-in. inside diameter by 14 ft. long; sheets, heads and butt-straps of flange steel, 60,000 lbs. tensile strength, ⅝-in. thick. The Atlas Car & Manufacturing Co. submitted bid to furnish for the disposal plant six steel side-dump standard gage cars, complete and delivered, at $2,705 each, cars to have capacity of 1,400 cu. ft., truck and underframe of cars M. C. B. standard, 80,000 lbs. capacity. W. J. Carter is City Engr.

INDIANAPOLIS, IND.—Bids are being received by the Board of Public Works for sprinkling unimproved streets. Appropriation, $40,000.

ST. BONIFACE, MAN.—Bids are asked by the city until March 22 for furnishing street sprinkler and street sweeping machine. Cecil Goddard is Town Engr.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

MELROSE, MASS.—See under Sewerage.

HARTFORD, CONN.—Bids are asked until March 18, by the Board of Contract and Supply, Chas. E. Parker, Secy., for furnishing and delivering steam road roller weighing 10 tons or more. Bids shall include an allowance in exchange for 10-ton Harrisburg steam road roller now owned by the city.

WATERBURY, CONN.—The Board of Public Works has recommended laying sidewalks on portions of following streets: West Main, vitrified brick, $57,000, bitulithic, $44,000. North Main, brick, $17,000, bitulithic, $13,000. Farm, brick, $7,000, bitulithic, $5,500. Prospect, brick, $13,000, bitulithic, $10,200. Bishop, brick, $10,000, bitulithic, $8,600. Elizabeth, brick, $6,500, bitulithic, $5,000. East Main, brick, $35,500, bitulithic, $27,100. Also for laying sidewalks on portions of following streets: North Willow, Benedict, Baldwin, Round Hill, Fairview and River Sts. and Roseland Ave. Robert A. Cairns is City Engr.

ALBANY, N. Y.—Bids are asked by the Board of Contract and Supply until 3 p. m., March 18, for improvement of John St. from the west line of Broadway to east line of Franklin St. The work includes grading, curbing and paving carriageway with vitrified paving blocks, repairing and laying sidewalks with flags and vitrified bricks, building receiving basins and laying vitrified pipe sewer under carriageway. Bids also are asked at the same time for improvement of Philip St., from south line of Park Ave. to north line of Warren St. The work includes grading, curbing and paving carriageway with vitrified paving blocks, repairing and laying sidewalks with flags and vitrified brick, laying about 290 ft. of 18-in. pipe sewer and building receiving basins. Bids also are asked at the same time for improvement of Arch St., from west line of Church St. to east line of South Pearl St. The work includes grading, curbing and paving carriageway with vitrified paving blocks and repairing and laying sidewalks wtih flags and vitrified brick. Walter Melius is City Engr. Isidore Wachsman is Clk. Bd. of Contract and Supply.

CORNING, N. Y.—The following bids were received Feb. 28 by the Board of Public Works, Robert H. Canfield, Supt., for constructing 17,705 sq. yds. brick pavement with cement curbs and gutters: McGREEVY CONSTRUCTION CO., Ithaca, N. Y. (awarded contract), $43,704; Bradley & Nolan, Corning, N. Y., $45,601, and Costello & Meager, Elmira, N. Y., $47,139. Robert H. Canfield is City Engr.

DUNKIRK, N. Y.—Bids are asked by the Common Council until 8 p. m., March 26, for paving and grading or macadamizing portions of East Front and Lake Sts. L. N. Murray is City Clk. (Advertised, Engineering News.)

NEWBURGH, N. Y.—Contract for paving portion of Lander St. and Leroy Pl. has been let to the STANDARD BITULITHIC CO., 253 Broadway, New York. The bid of this company was as follows: For bitulithic on bituminous foundation, $53,806; bitulithic on concrete foundation, $55,533. Everett Garrison is City Engr.

NEW YORK, N. Y.—Bids are asked by Bird S. Coler, Pres. Boro. of Brooklyn, until 11 a. m., March 27, for regulating, grading, and paving various streets, Boro. of Brooklyn.

PORT CHESTER, N. Y.—Bids are asked by C. D. Camp, Village Clk, until 8 p. m., April 1, for improving Grace Church St., Westchester Ave. and Old White Plains Road, Haseco Ave. and Clark St. and Summit Ave. The approximate quantity of work will be as follows: Excavation, 3,900 cu. yds.; new curbing, 8,750 lin. ft.; vitrified pipe drains, 1,300 lin. ft.; brick pavement, 12,400 sq. yds.; macadam pavement, 11,700 sq. yds.; one receiving basin and eleven manholes. (Advertised, Engineering News.)

NEW YORK, N. Y.—Bids are asked by the Department of Parks, Moses Hermann, Pres., until 3 p. m., March 28, for furnishing and delivering top soil or garden mould to parks and parkways in Boro. of Brooklyn.

Bids also are asked at the same time for furnishing and delivering Hudson River road gravel at Prospect Park, Boro. of Brooklyn.

Bids are asked by Louis F. Haffen, Pres. Boro. of The Bronx, until 11 a. m., March 26, for regulating, grading, setting curbstones, flagging the sidewalks, laying crosswalks, building approaches and placing fences in various streets, Boro. of The Bronx.

PLATTSBURG, N. Y.—The contract for asphalt block paving on Dock and Clinton Sts., has been awarded to the HASTINGS PAVEMENT CO., 25 Broad St., New York.

CAPE MAY, N. J.—W. H. Lechard, of Atlantic City, N. J., has been awarded contract for constructing wagon road from 23d St., Wildwood, to the mainland and to site of proposed water-works plant, about two miles inland.

ELIZABETH, N. J.—Two bids have been received by the City Council and referred to the Committee on Streets and Highways for paving Walnut St., from East Broad St. to Fairmount Ave. J. J. Potts bid $31,517 and the Barber Asphalt Co. $33,793. William H. Lutter, Jr., is City Engr.

HOLLY BEACH, N. J.—John W. Young is reported to have received contract for grading and graveling portions of various streets, at $20,000.

HOBOKEN, N. J.—Bids are asked until 8 p. m., March 27, for improving Madison St., between Fifth and Eighth Sts. The work consists of grading, paving, laying curbs, sidewalks and improving street intersections. James H. Londrigan is City Clk.

SOUTH ORANGE, N. J.—Bids are asked until March 18 by the Board of Village Trustees for laying all cement sidewalks during the present year. Walter T. Wallace is Chn. Com. on Streets and Highways.

SOMERVILLE, N. J.—We are officially advised that WILLIAM HARDGRAVE, of Somerville, N. J., has been awarded contract for macadamizing 3.14 miles of road in Branchburg Township, at $27,362. Bids were also received as follows: John McNabb, Bound Brook, N. J., $30,600; John H. Hurley, Trenton, N. J., $32,162; Thomas G. McGovern, Trenton, N. J., $37,177; Munson & Lewis, Rockaway, N. J., $32,882; E. C. Humphrey, Hackensack, N. J., $31,582, and Richards & Gaston, Somerville, N. J., $33,223. Joshua Doughty, Jr., is County Engr.

TITUSVILLE, PA.—Bids are asked until March 25, for regulating, grading, paving and curbing Brook St., from east line of Franklin St. to west line of Kerr St. Bids are asked on vitrified, shale or fire clay brick or block only. The following is approximate estimate of work: 3,460 cu. yds. excavation; 4,575 sq. yds. pavement complete; 3,500 lin. ft. curbing; 125 lin. ft. circular curbing and five O'Brien receivers. W. M. Dame is City Clk. H. A. Holstein is City Engr. (Advertised, Engineering News.)

MONESSEN, PA.—BOWMAN & CO., McKeesport, Pa., has been awarded contract for grading, curbing and paving about 11,350 sq. yds. of paving at $24,014. J. F. Irwin is Boro. Engr.

PITTSBURG, PA.—Bids are asked until March 26 by the Board of County Commissioners, for constructing the following roads: Lownes Run and Rochester Rd., in McCandless and Franklin Townships, about 6 miles; Monongahela City and Elizabeth Rd., Forward Township, about 2¾ miles; Fair Haven and Provost Rd., Baldwin Township, about 1.6 miles; Campbells Run Rd., Robinson and Collier Townships, about 4¾ miles; Millerstown and Culmerville Rd., West Deer Township, about 2½ miles; Moon and Clinton Rd., Moon and Clinton Townships, about 3.8 miles. Geo. T. Barnsley is County Road Engr., 26 Court House, Pittsburg.

ANNAPOLIS, MD.—The City Council Feb. 5 awarded contract for constructing about 15 squares of tarred macadam pavement to WILLIAM E. FELDMEYER, at $16,515. The only other bid received was submitted by the R. J. Beall Construction Co., Washington, D. C., at $21,427.

NORFOLK, VA.—LOUIS LAWSON has been awarded contract to pave Liberty, Main and Berkley Aves., Berkley Ward, for 60 cts. per sq. yd., the city to furnish the Belgian block and contractor to do necessary excavation and furnish other materials. W. T. Brook is City Engr.

LEXINGTON, N. C.—We are officially advised that plans are being prepared for improving the streets of Lexington, N. C. Bonds to the amount of $40,000 have been sold. Gilbert C. White, Durham, N. C., is Engr.

ATLANTA, GA.—The County Board of Public Works plans to construct about 25 miles of well paved roads during the present year. Col. Clifford L. Anderson is Chn. Com. on Pub. Wks.

JACKSONVILLE, FLA.—DAVID M. BAKER has been awarded contract for street paving. Philip Prioleau is City Engr.

JEFFERSON, MISS.—George H. Stanchfield, of Fond du Lac, and E. L. Bartlett, of Watertown, are reported to have secured contract for paving in Jefferson at $25,000.

LOUISVILLE, KY.—Bids are asked by the Board of Public Works until March 22, for construction of about 7,800 sq. yds. of brick sidewalks. Estimated cost, $12,000. J. P. Claybrook is Ch. Engr., Dept. Pub. Wks.

LOUISVILLE, KY.—Vitrified brick pavements will be constructed in portions of various streets. Joseph P. Claybrook is City Engr.

OWENSBORO, KY.—Bids are asked by Daviess County Fiscal Court, W. W. Owen, County Judge, until March 15, for construction of five miles of macadam road.

CLEVELAND, OHIO.—Bids are asked until March 30 by the Board of County Commissioners, Julius C. Dorn, Clk, for grading, draining and paving portion of Northfield Rd. A. B. Lea is County Engr.

DAYTON, OHIO.—The Board of Public Service has let contract for paving Emmett St., from Main to Linwood Sts., to A. WROE & SON, at $4,194. Robert E. Kline is City Engr.

SPRINGFIELD, OHIO.—Cement sidewalks, curbs and gutters may be laid on various streets this spring. W. H. Sieverling is City Engr.

LIMA, OHIO.—The Board of Public Service received the following bids March 5 for constructing brick pavement on North Main St., between the Pennsylvania R. R. right-of-way and Murphy St., and on South Pine St., from Elm St. to St. Johns Ave.: E. A. Freshwater & Son, Athens block, $1.49; Nelsonville, $1.48; Wassel, $1.53; Peebles, $1.48; Big Four, $1.47. Murray & Jameson, Lima, Twentieth Century block, $1.54; Metropolitan, $1.58; Logan, $1.58; Athens, $1.60; Peebles, $1.57. T. J. Mulligan, Lima, Logan, $1.60; Metropolitan, $1.59; Wassel, $1.70; Peebles, $1.65. Blodgett & Hardin, Lima, Townsend block, $1.77; Athens, $1.75; Nelsonville, $1.75; Wooster, $1.80; Big Four, $1.72. Geiger & Son, Lima, Athens, $2.25; Nelsonville, $2.25. M. O'Brien, Lima, Logan, $1.79; Metropolitan, $1.83; Townsend, $1.88. Van Heil, Lima, Athens, $1.54; Nelsonville, $1.54; Wooster, $1.64; Bolan, $1.58; Wassel, $1.59; Big Four, $1.52; Peebles, $1.56. Kelly Bros., Portsmouth, Ohio.—Athens, $1.53; Nelsonville, $1.53; Peebles, $1.52; Townsend, $1.59; Wassel, $1.56; Big Four, $1.51. Bluffton Stone Co., Bluffton, Ohio.—Athens, $1.50; Nelsonville, $1.50; Big Four, $1.52. J. K. Brice is Ch. Engr. Pub. Service Dept.

COVINGTON, IND.—Bids are asked by the County Commissioners until April 2, for constructing 4½ miles of crushed stone and four miles of gravel roads. William B. La Baw, at Veedersburg, Ind., is County Surv.

SHERIDAN, IND.—The Town Board has awarded contract for paving Georgia St. with brick to NOLAN & SLATTERY, of Crawfordsville, for $14,000.

SOUTH BEND, IND.—Bids are asked by the Board of Public Works until March 19 for about 22,000 sq. yds. of brick paving. A. J. Hammond is City Engr.

GOSHEN, IND.—The City Council has awarded contract for paving Purl St. with Metropolitan block, to W. W. HATCH & SONS, of this city. C. C. Witt is City Engr.

DETROIT, MICH.—GARRIER BROS. have been awarded contract for constructing all artificial storm sidewalks and intersection walks required and ordered during the year, at 10¾ cts. per sq. ft. for streets in the Eastern District, and 12 cts. for the Western District. George T. Gaston is City Engr.

LANSING, MICH—Bids are asked until March 18 for paving Franklin Ave., about 7,000 sq. yds., with brick and gravel foundation. H. A. Collar is City Engr.

HANCOCK, MICH.—Bids are asked until 8 p. m., March 18, for furnishing all materials and grading, curbing and paving Quincy St., from west line of Mesnard St. to the west line of Elevation St., with brick, bitulithic, asphalt, cresoted wood block, or granitoid pavement on concrete foundation, with combined curb and gutter. A. F. MacDonald is City Clk.

AURORA, ILL.—Bids are asked until 2 p. m., March 20, for constructing about 4,600 yds. of asphalt pavement and 3,240 ft. of combined curb and gutter. M. J. Tarble is City Engr. (Advertised, Engineering News.)

PEORIA, ILL.—The contract for paving Nebraska Ave., from Wisconsin to Pacific Ave., has been let to J. S. ALLEN for $9,755. The contract for paving Douglas St., from Main to Chambers St., has been let to J. S. ALLEN for $5,589, and contract for paving Wisconsin Ave., from Frye to McClure St., ten blocks, let to A. D. THOMPSON, for $8,922. D. H. Roberts is Asst. City Engr.

THAWVILLE, ILL.—Bids are asked by the Highway Commissioners until 1 p. m., March 18, for constructing 55 ft. highway bridge on concrete. Ira Baker, at Champaign, Ill., is Engr.

RACINE, WIS.—The Board of Public Works has awarded contract for paving Wisconsin St. with asphalt to the BARBER ASPHALT CO.; paving Lafayette Ave. with brick, to E. R. HARDING; West Sixth St., to JAMES CAPE & SON, 16th St., to R. R. BIRDSALL. P. H. Connolly is City Engr.

MILWAUKEE, WIS.—The contract has been awarded to the BADGER CONSTRUCTION CO. for laying 4-in. creosote block pavement upon 6-in. concrete foundation on portion of Wells St., at $3.05 per sq. yd. Charles G. Poetsch is City Engr.

DAVENPORT, IOWA.—The HYDRAULIC CONSTRUCTION CO. has been awarded contract for paving portion of Clay St. Contract for paving portions of Bowditch, Seventh and Davie Sts., has been let to the DAVENPORT CONSTRUCTION CO. Thomas Murray is City Engr.

DULUTH, MINN.—Bids will probably be received about April 20 for paving Jefferson St., from 13th to 22d Aves. E., with asphalt, tar macadam or creosoted block. Thomas F. McGilvray is City Engr.

ST. PAUL, MINN.—Bids are asked by the Board of County Commissioners until 10 a. m., April 1, for grading and macadamizing portions of Bald Eagle Lake Road. Edward G. Grahmer is County Audr.

OLATHE, KAN.—Bids are asked until March 18 for paving and curbing Chestnut and Cherry Sts. Lewis G. Ferrel is City Engr.

OTTAWA, KAN.—Bids are asked until 5 p. m., April 3, for grading, curbing with concrete curbing and paving about 13,000 sq. yds. with two courses of vitrified brick on South Main St. W. O. Myers is City Engr.

OMAHA, NEB.—Bids are asked by D. B. Butler, City Clk, until March 25, for paving various streets. Andrew Rosewater is City Engr.

ABERDEEN, S. DAK.—We are officially advised that the contract for paving has been awarded to the KETTLE RIVER QUARRIES CO., of Minneapolis, Minn., for creosoted wood block with No. 16 treatment, and ten-year guarantee, at $115,848. The area to be paved is 38,871 sq. yds., making the average price per yd. $2.98. The foundations are 5 in. deep, of concrete made of 1 to 6 Portland, with unscreened local sand. Amount of excavation, 9 in. deep over whole area. Bids were also submitted by Flinn & Hanlon, Sioux City, Iowa, and P. McDonnell, Duluth, Minn. D. Cuyler Washburn is City Engr.

ST. LOUIS, MO.—Bids are asked by the Board of Public Improvements, until noon, March 22, for grading, curbing, etc., various streets. C. M. Talbert is C. E., Bd. Pub. Impvts.

FORT WORTH, TEX.—The TEXAS CONSTRUCTION CO. has been awarded contract for paving with brick on concrete foundation Monroe and Jackson Sts. in the vicinity of city hall. John B. Hawley is City Engr.

TRINIDAD, COLO.—Bids are being received by I. Q. Milliken, City Clk., for paving in District No. 1.

SPOKANE, WASH.—H. L. LILLIENTHAL has been awarded contract for constructing Manito Park Boulevard, at $12,375.

SEATTLE, WASH. — Contract has been awarded to the INDEPENDENT ASPHALT PAVING CO., 204 Pioneer Bldg., Seattle, Wash., at $297,163 for paving East Jefferson St. One other bid was submitted by the Barber Asphalt Paving Co., 612 Mutual Life Bldg., Seattle, Wash., at $315,032. R. H. Thomson is City Engr. Itemized bids will be given next week under Contract Prices.

PASADENA, CAL.—Andrew Holloway is reported to have secured contract for paving Oakland Ave., for $14,813. S. F. Pearson is City Engr.

FRESNO, CAL.—We are officially advised that bids were received by the Board of Supervisors, A. D. Ewing, Clk., for constructing trestle bridge in Fresno County as follows: Atlantic, Gulf & Pacific Co., Monadnock Bldg., San Francisco, Cal., $1,980, and H. A. Hansen, Fresno, Cal., $3,200.

WINNIPEG, MAN.—Bids will soon be asked for construction of asphalt pavement 24 ft. wide on Victor St. Cost, $7,260. H. N. Ruttan is City Engr.

MOOSE JAW, SASK.—Granolithic sidewalks will be constructed. Estimated cost, $26,865.

EDMONTON, ALTA.—The contract for laying 60,000 yds. of bitulithic pavement has been awarded to the BITULITHIC & CONSTRUCTION CO., of Winnipeg, Man. P. P. Kelly is City Engr.

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

PORTSMOUTH, N. H.—The Bureau of Yards and Docks will invite proposals shortly for constructing a brick building with granite trimmings, steel frame, about 228 × 80 ft., at the Navy Yard, Portsmouth, N. H., for use as a pattern shop for the Department of Steam Engineering. The contract will call for completion of the work within twelve months. The appropriation amounts to $100,000. The advertisement inviting proposals probably will appear in about four weeks, and bids probably will be opened about a month after. H. H. Rosseau, Washington, D. C., is Ch. of Bureau.

BENNINGTON, VT.—J. W. Hurlburt has purchased the mill property on Park St., last occupied by the Bennington Knitting Co. Mr. Hurlburt is associated with Bellows Falls and New York parties and a company will be organized to conduct the business of manufacturing waxed paper. The new company has taken possession and expects to have the mill in operation by April 1.

FALL RIVER, MASS.—It is reported that F. W. Cameron & Co., paper manufacturers, of Boston, are about to erect a $100,000 paper manufacturing plant in this city. The site selected is the old Allen cycle track.

NEW BEDFORD, MASS.—A mill, 200 × 180 ft., to be used as a weave shed will be built immediately by the Gosnold Corporation. It will be located between two mills now being run by the owners.

CENTRAL FALLS, R. I.—The Watposet Mfg. Co., recently incorporated by Frederick W. Easton, Joseph Quarnby and Harold C. Barnefield, with a capital stock of $10,000, is to build a $20,000 mill in Central Falls for manufacturing cotton and silk goods. It is expected that the mill will be ready for occupancy in August. The building will be two stories high and of modern mill construction. About 150 operatives will be employed at the start.

PASCOAG, R. I.—Work on the mill to be erected on the Emerson Mill site will probably begin next month. The new mill, which will be a fireproof building, will be 250 ft. long and 76 ft. wide. It will be two stories high on the north side and one story in height on the south side, which is above the dam. It will be built of concrete throughout. Fred. L. Sayles is interested.

PROVIDENCE, R. I.—The Wanskuck Co. has secured permit for erecting an addition to its present plant. The new building will be 112 × 75 ft., and three stories in height. It will be of brick construction, with flat tarred and graveled roof.

PROVIDENCE, R. I.—The Queen Dyeing Co. proposes to increase its plant by a 1-story brick building, 150 × 64 ft. The addition is to be used for manufacturing purposes and it will be started as soon as possible.

LOCKPORT, N. Y.—Howard M. Witbeck has purchased a large plot of land on Green St., midway between Lock and Church Sts., facing the New York Central R. R., and will erect a modern flour mill. The new industry will employ many hands. It will have a daily capacity of 700 bbls. The Lockport Gas & Electric Co. will furnish 300 HP. The mills will be known as the Globe Mills and will be operated in connection with those recently purchased by Mr. Witbeck in Camillus, N. Y. Mr. Witbeck has purchased the elevator of the Mosier Malting Co. near the site of the proposed mill.

BLACK ROCK (Buffalo post-office), N. Y. —A copper rolling mill is to be erected here. A site is under option and unless plans fail the construction of a plant costing in the neighborhood of $500,000 will be begun this spring. The company, it is reported, will have a capacity of about 6,000,000 lbs. of rolled copper a year. It will be known as the Buffalo Copper Rolling Co. A number of Buffalo men are reported to be interested, including Robert L. Fryer, Franklin D. Locke, Harry T. Ramsdell, George A. Ray, A. E. Jones, Capt. M. M. Drake and others.

CLARK MILLS, N. Y.—The Hinds & Harrison Plush Co., Clark Mills, will build a brick addition to its present plant, 180 × 270 ft., for spinning yarn. It will be operated by electricity, and a power plant will be erected.

SYRACUSE, N. Y.—The Bartels Brewing Co. is reported to have had plans prepared by Paul Ott, of Chicago, Ill., for improvements to be made to its plant at a cost of about $150,000. The improvements include a bottling plant, which is to cost $50,000. A 5-story building is to be erected east of the office building and improvements made to the electric light plant. Wherever possible electricity is to be substituted for steam. Albert K. Hiscock is Secy.

BUFFALO, N. Y.—The Buffalo Copper Rolling Co. will erect a plant to cost $500,000. It is reported that a site is under option in Black Rock. Robert L. Fryer, 685 Delaware Ave., is interested.

The Websters Citizens Co., recently incorporated, will build a factory with storehouses, for manufacturing artificial ice. Plans have been prepared and the contracts will be awarded soon. The estimated cost of the buildings and equipment is $300,000. The ice plant will have a capacity of 40,000 tons a year.

The Huber Account Register Co., manufacturers of filing devices, have purchased a site at Main St. and the Erie R. R., and will erect two 3-story factory buildings 30 × 140 ft.

CAMDEN, N. J.—Plans are being prepared for an addition to the plant of the Victor Talking Machine Co., 114 North Front St. It will be a 5-story structure of reinforced concrete construction.

TRENTON, N. J.—The Woven Steel Hose & Rubber Co. will have plans prepared soon for an addition to its manufacturing plant at this city. The structure will be three stories in height. A power plant and special machinery will be installed.

CORAOPOLIS, PA.—The Pittsburg Sanitary Mfg. Co., which recently was granted a charter in New Jersey, has broken ground for plant at Coraopolis, a suburb of this city. The company will manufacture bath tubs and hollow ware. The following are the officers of the company: W. L. Reed, of the Pittsburg Supply Co., Pres.; Charles A. Bruce, Treas. and Gen. Mgr., and W. P. Bryar, Gen. Mgr. of the Bailey-Farrell Mfg. Co., Secy.

LEETSDALE, PA.—The Zug Iron & Steel Co. will remove its plant from 13th and Etna Sts., Pittsburg, to a site on the Ohio River, near Leetsdale. The new site for the mill will cost about $75,000, and about $500,000 will be expended for an improved plant.

READING PA.—Plans are being prepared by H. S. Head, 536 Pennsylvania St., Reading, for a factory here. The building will be two stories high, 35 × 245 ft., and will be constructed of brick. A power-house and special machinery will be installed.

UNIONTOWN, PA.—The New Haven Sheet Iron Co. has been formed and will build a large plant near Uniontown for manufacturing mine supplies. The company will devote its attention to the manufacture of mine cars from structural steel, a new field, as steel does not now enter into the making of mine cars.

ERIE, PA.—Contract has been awarded to JOHN O. KELLER, Hazlewood Ave., for a 2-story brick box factory for the American Box Co. T. J. Schaub, Arch., Sterritt Bldg., Allegheny, Pa., prepared plans.

BRISTOL, PA.—Estimates are being received for erection of 13 buildings at Bristol for the Standard Cast Iron Pipe & Foundry Co. The plant will cost about $500,000. All the buildings will be of brick and steel frame construction, and all will be one story high, except the office and pattern buildings. The foundries will contain cranes. The buildings of the plant are as follows: Office building, 50 ft. square; two main foundry buildings, each 100 × 459 ft.; loam foundry, 129 × 189 ft.; cleaning, storage and shipping building, 52 × 220 ft.; machine shop, 83 × 203 ft.; power-house, 50 × 150 ft.; pattern shop and pattern storage shop, each 53 × 129 ft.; blacksmith shop, 32 × 62 ft.; stable, 10 × 52 ft.; oil and paint house, 14 × 43 ft., and a rope house, 32 × 74 ft.

PHILADELPHIA, PA.—A 10-story factory will be built at the corner of Twelfth and Callowhill Sts. for the Wolf Realty Co. Stearns & Castor, Stephen Girard Bldg., are Archs. Estimated cost, $250,000.

MARE ISLAND (Philadelphia post-office), PA.—The Bureau of Yards and Docks will invite proposals shortly for a 5-ton locomotive jib crane, to be delivered at the Navy Yard, League Island, Pa., for which there is an appropriation of $7,500. Six months will be allowed for the work.

WILKES-BARRE, PA. — The Columbia Shadecloth Co., 30 East 21st St., New York, has purchased the Wyoming Valley Lace Mills of Wilkes-Barre and the capital has been increased from $2,000,000 to $2,500,000. The increased capital is to make improvements and the output of the mill will be doubled.

BALTIMORE, MD.—Samuel Siegal, 213 Courtland St., will have plans prepared at an early date for a furniture factory to be constructed of brick, 75 × 100 ft. Power plant and wood working machinery will be installed.

CORNELIUS, N. C.—The Gem Yarn Mills Co., of Cornelius, is to have a plant of 3,000 spindles and the building is now being erected. The cost will be about $50,000, and it is expected that operations will begin by June 1. J. B. Cornelius is Pres., F. C. Schmitt, Treas., and the capital is $75,000.

WOODRUFF, S. C.—W. S. Gray & Sons, it is reported, will build a cotton-yarn mill. They will install 20,000 spindles for manufacturing yarn, and about $200,000 will be invested. Probably electricity developed from water-power will be used for power. T. E. Moore, of Tucapau; W. E. Burnett and Geo. W. Nicholls, of Spartanburg, S. C.; J. E. Sirrine, of Greenville, S. C.; W. H. Gray and W. S. Gray, of Woodruff, will be the directors. J. E. Sirrine is Arch. and Engr.-in-Charge.

LAURENS, S. C.—Watts Cotton Mill is reported to have awarded contract to G. C. THOMPSON & BROS., of Birmingham, Ala., for the erection of 95-ft. extension to present buildings.

DALLAS, GA.—The Paulding County Cotton Mfg. Co., Dallas, Ga., contemplates doubling its present equipment of 5,040 spindles.

BROOKHAVEN, MISS.—The Central Lumber Co., recently incorporated, will operate saw and planing mill with a daily capacity of 50,000 ft. Three frame buildings, 30 × 60 ft., 125 × 200 ft. and 75 × 75 ft., will be erected. About $50,000 will be expended. Equipment will be installed. S. E. Moreton is Secy.-Treas.

MERIDIAN, MISS.—A car barn 175 × 225 ft., of brick construction, with steel truss ceiling for roof, will be erected by the Meridian Light & Ry. Co., and equipped with the necessary lathes, etc., for complete car-repair shop for car bodies, trucks, motors, etc. Machinery will be purchased. A. B. Paterson is Mgr.

NEW ORLEANS, LA.—It is reported that a $58,000 ice plant is to be installed by the Cosmopolitan Ice Co. in its building at 527 Chartres St.

OPELOUSAS, LA.—P. A. Rutledge and associates will erect band mill 50 × 114 ft., manufacturing hardwood lumber. About $25,000 will be expended in building and equipment.

HARMS, TENN.—Application has been made for a charter by the Valley Cotton & Grain Mfg. Co., of Harms. This company will erect a cotton mill at Harms, to be run by water power from Elk River.

NEWPORT, TENN.—Puryear & Bason, of Mebane, N. C., will establish a $40,000 chair factory here.

NASHVILLE, TENN.—Plans for an addition to the car building department of the Nashville, Chattanooga & St. Louis Ry. Co.'s shops are being considered, and the proposed work will cost approximately $50,000. The work on the additional buildings necessary to enlarge this department of the work will begin shortly, and orders for the necessary machinery will be placed immediately. F. H. Scheffer is Supt. of Machinery.

ELIZABETHTOWN, KY.—The Black Diamond Co. will erect a $10,000 sumac factory here, which will be two stories high and contain about 17,000 sq. ft.

COLUMBUS, OHIO.—The Bonney-Floyd Co. has let the contract for converter building at its new steel castings plant in the southern part of the city to the PITTSBURG BRIDGE & IRON CO., Rochester, Pa. The building will be 100 × 150 ft., about 60 ft. high, and will be of solid steel, with the exception of the roof, which will be of asbestos. The building will contain the converter of the company and two electric cranes, one of five and the other of ten tons lifting capacity. This building is to be ready for use May 1. The contracts for the other buildings of the plant, it is stated, will soon be let.

CINCINNATI, OHIO.—A manufacturing building for the D. T. Williams Valve Co. will be constructed soon. Samuel Hannaford & Sons are Archs., Hulbert Block. Cost, $125,000.

CARTHAGE, OHIO.—The Renner Soap Co. will erect a plant at Carthage, to cost about $100,000. A power building and a manufacturing building will be erected at once. Two more will be erected later.

GARY, IND.—The American Bridge Co., 42 Broadway, New York, N. Y., has purchased a 100-acre lot upon which to build a subsidiary plant in Gary.

NEWCASTLE, IND.—The J. D. Smith Co. is asking for bids for the erection of a plant for manufacturing automobiles. The estimated cost is $200,000.

FORT WAYNE, IND.—We are officially advised that contract has been awarded to the AMERICAN CONCRETE-STEEL CO., Union Bldg., Newark, N. J., for erection of the new lamp works and power-house for the General Electric Co., Fort Wayne. The main building will be 150 × 229 ft., four stories high, and the power-house will be 60 × 70 ft., with stack. The construction will be of reinforced concrete throughout. The structure will be built from plans prepared by the American Concrete-Steel Co., at a cost of $200,000.

BIPPUS, IND.—The Bippus Tile Co., recently incorporated, will build and equip a factory here to manufacture tile and cement building blocks, etc. Bradley Howenstein is Pres., and M. G. Wright, Secy.

FLINT, MICH.—The Buick Co., of this city, will build an extension of its plant, to be 72 × 756 ft. It will contain 163,000 sq. ft. of floor space, two stories and a basement, to be built of sand lime brick.

PLAINWELL, MICH.—The Otsego Coated Paper Co. will build an addition of 400 × 68 ft., two stories and a basement, to its mill. The contract will be let soon.

CHICAGO, ILL.—Nimmons & Fellows, Marquette Bldg., 204 Dearborn St., will erect a factory to be built at South 44th and Spaulding Aves., for Spaulding & Merrick, tobacconists, 271 Michigan St. It will be 5-story, 110 × 540 ft., of steel and tile construction, with pressed brick and stone exterior, composition and saw-tooth roof, steam heat, wiring for electric light, and is estimated to cost $500,000.

MILWAUKEE, WIS.—A factory which will manufacture silks and ribbons is to be located in this city. The stockholders of the factory held a meeting recently and elected the following officers to serve for the ensuing year: President, Dr. J. B. Tobias; treasurer, Patrick F. Kelly. The company will be organized with a capital of $500,000, this amount being gradually increased as the output of the factory advances.

FORT ATKINSON, WIS.—The Northwestern Mfg. Co. is preparing to build an $80,000 brick factory building, and will install machinery to make carriages and farm implements.

PARK FALLS, WIS.—The Roddis Lumber & Veneer Co., of Marshfield, will build a plant at Park Falls, at a cost of $100,000. The power plant will have a capacity of 350 to 400 HP.

ST. PAUL, MINN.—The American Hoist & Derrick Co. has made arrangements for erection of a foundry building valued at $100,000 on the West Side flats. It will be a brick structure, with an iron roof.

DALLAS, TEX.—Dallas Brewing Association has had plans prepared by Louis Lehle, Schiller Bldg., Chicago, Ill., for erection of proposed addition to be used as stock mill, brew-house and ice factory. It will be five stories high, 80 × 140 ft., with brick, stone and steel, tar and gravel roof, gas and electricity, and nickel plumbing. Cost, $180,000.

HOUSTON, TEX.—The Pritchard Rice Milling Co. has been chartered with Jonathan Lane, Pres., and Paul E. Pritchard, Secy., to operate rice mill with a daily capacity of 3,000 bags, elevator with a capacity of 50,000 bags, and warehouse. The mill building will be of brick, four stories, 65 × 70 ft. The elevator is 114 ft. high, 60 × 70 ft., and warehouse 125 × 200 ft. Plans for buildings were prepared by Hayes & Jones.

SEATTLE, WASH.—The contract for erecting factory of the Washington Shoe Mfg. Co., 400 Occidental St., at the corner of Eighth Ave., South, and Snoqualmie Sts., has been let to HARVEY J. ALLEN, for $38,000. The building will be of reinforced concrete construction, and will be ready for occupancy by the middle of July. Andrew McBean is Arch., Colman Bldg.

COPPER CLIFF, ONT.—We are officially advised that H. F. E. Gamm is designing new blast furnaces and converter plant for the Canadian Copper Co., Copper Cliff.

TORONTO, ONT.—Bids are asked by Chadwick & Beckett, Archs., Toronto, for constructing a 6-story and basement factory for Christie, Brown & Co., Toronto.

GALT, ONT.—The Macgregor-Gourlay Co., Galt, has let the contract for an addition to their plant to SIBLEY & MILLER, of Galt. The new building will be 142 ft. long, 51 ft. wide, and two stories high.

VANCOUVER, B. C.—The Vancouver Breweries, Ltd., will erect a new brewery and malting department at a cost of $150,000. Work will be commenced in the spring.

MISCELLANEOUS CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

QUAY WALL.—Quebec, Que.—M. P. & J. T. DAVIS, of Quebec, are contractors for quay wall outside Louise Basin for the Dominion Government. Estimated cost, $200,000.

TELEPHONE LINE.—Rainey River, Ont.—The Rainey River International Telephone Co. has decided to install a long-distance line between here and Fort Francis, a distance of 55 miles.

TELEPHONE SYSTEM.—Strathcona, Alta.—This town has granted the Edmonton City Council a 15-year franchise to extend its automatic telephone system across the North Saskatchewan River to this town and operate a system here.

TELEPHONE LINE.—Barrie, Ont.—At a recent meeting of the Town Council it was unanimously decided to petition the Ontario Government to construct a government long-distance telephone line.

DREDGING.—Washington, D. C.—Bids are asked by the Bureau of Yards and Docks, Navy Dept., until 11 a. m., March 30, for dredging in the Delaware River, Navy Yard, League Island, Pa. H. H. Rousseau, Ch. of Bureau.

CRIB AND RIP-RAP.—Cincinnati, Ohio.—Bids are asked until 2 p. m., April 5, for constructing crib work and rip-rap protection at Lock No. 1, Big Sandy River, Catlettsburg, Ky. Maj. J. G. Warren, U. S. Engrs. (Advertised, Engineering News).

WHALING STATION.—Victoria, B. C.—The Pacific Whaling Co. has decided to erect a large whaling station at Kyuquot Sound, Vancouver Island. The station will cover five acres, and it is said it will be the largest in the world. Capt. S. Balcom is in charge.

DOCK.—Toronto, Ont.—The contract for building the new dock and approaches at Rondeau Park has been awarded by the Provincial Government to the BLIGHT, FIELDER CO., of Chatham, Ont., whose bid of $5,385 was the lowest. Noted on Feb. 28.

TELEPHONE SYSTEM.—Fort Saskatchewan, Alta.—Council is making arrangements for the installation of a municipal telephone system. A central energy system has been decided upon with connection with the government long-distance line at Lloydminster. H. E. Daniel, Mayor.

MONUMENT.—La Fayette, Ind.—The Tippecanoe Battle Ground Monumental Association has ordered plans for a monument to be erected on the Tippecanoe Battlefield, seven miles north of this city. The appropriation is $25,000. The contract will be let this spring.

DREDGING.—Memphis, Tenn.—Bids were received by H. N. Pharr, Ch. Engr., St. Francis Levee Board, on March 6 for dredging about 125,000 cu. yds. of earth at Mound City, Ark. Graves & Stephens, Commercial Bank Bldg., Cleveland, Ohio, were lowest bidders. Estimated cost, $20,000.

GREENHOUSE.—New York, N. Y.—Bids are asked until 3 p. m., March 28, by the Department of Parks, for furnishing all labor and materials for completely erecting and constructing a greenhouse, boiler house and steam trench in the Botanical Garden, in Bronx Park. Moses Herrman, Pres.

MONUMENT.—Jamestown, Va.—Six bids were opened March 7, at the office of the Supervising Architect of the Treasury, Washington, D. C., for the construction of a replica of the Commemorative Monument for the Jamestown Exposition. The lowest bid was submtited by H. B. Ward & Co., Norfolk, Va., at $5,840.

TELEPHONE SYSTEM.—Virden, Man.—Council has decided upon a municipal telephone system for the municipality of Wallace. Within the municipality there are 455 farmhouses which can be provided with a telephone service by the construction of 345 miles of pole line. Address A. G. McDougall, Virden, Man.

DREDGING.—Des Moines, Iowa.—Date on which bids were to have been received, March 20, for improvement of the Des Moines and Raccoon Rivers within the corporate limits of this city, consisting of dredging, rip-rap work, concrete construction, etc., has been postponed to May 2, it is announced. Estimated cost, $200,000. Address George D. Dobson, City Engr.

RIVER IMPROVEMENTS.—Fremont, Neb.—J. F. Hanson, Secy. of the Fremont Commercial Club, advises us that it is proposed to build a levee ten or twelve feet high, to protect city from overflow of the Platte River, and also to deepen river channel for distance of about 3½ miles, opposite city of Fremont. This matter is before the State Legislature.

TELEPHONE SUPPLIES.—Fort William, Ont.—During the present year the council will spend [illegible]7,000 in improvements and additions to the telephone plant here. The following supplies will be required for the work: 250 telephones, $2,500; 2,200 ft. 200 pair, lead-encased cable, $1,320; also top pins, pony glass insulators, and various sizes of wire. F. Routledge, Mayor.

RUBBLESTONE. — Boston, Mass. — Bids were received as follows on Feb. 28, for delivery of rubblestone in north jetty at Newburyport Harbor, Mass. Maj. Edward Burr, U. S. Engrs.: Rockport Granite Co. & Pigeon Hill Granite Co., $1.275 a ton; P. H. Doyen, $1.25 a ton; Brewster Construction & Engineering Co., 96 cts. a ton.

ORDNANCE.—Washington, D. C. — Bids are asked until March 20, by the Bureau of Ordnance, Navy Department, Washington, D. C., for furnishing 10,000 3-in. 50-calibre shell; 3,000 5-in. 50-pounder shell; 5,000 6-in., 2,000 8-in., and 1,000 12-in. target shell. The 6-in. and 8-in. shells are to be delivered by Sept. 15; all others by Dec. 31.

TIMBER CONTRACT.—Vancouver, B. C.—T. F. WILLIAMSON, Seattle, Wash., has received the contract to log 400,000,000 ft. of timber for the Weyerhaeuser Timber Co., on Vancouver Island. Mr. Williamson will build a logging railroad, wharf, office building, etc. J. L. Bridge, Jr., is Local Agent for the Weyerhaeuser Co., Dexter Horton Bldg., Seattle.

BEAR-TRAP GATES.—Wheeling, W. Va.—Bids were received by Capt. F. C. Boggs, U. S. Engrs., on March 12, for iron and steel for bear-trap gates for Dam No. 13, Ohio River, as follows: (a) Yellow pine; (b) oak; (c) cypress water-seal strips; (d) wedges: C. L. Gray Lumber Co., Meridian, Miss., (a) $37 per M. G. Elias & Bro., Buffalo, N. Y., (a) $41 per M.; (b) $45 per lin. ft.; (c) 11.5 cts. each; (d) 2 cts. each.

DREDGING.—New London, Conn.—The following are the bids opened on March 2 by Maj. Harry Taylor, Corps Engrs., U. S. A., New London, for dredging (a) New Haven Harbor, 60,000 cu. yds., per cu. yd.; (b) West River, 6,000 cu. yds., per cu. yd.; (c) total cost: J. P. Randerson, (a) 26 cts.; (b) 28 cts.; (c) $17,280. Atlantic Dredging Co., (a) 25½ cts.; (b) 23 cts.; (c) $16,680. Chas. F. Taylor, (a) 26½ cts.; (b) 30 cts.; (c) $17,700.

LEVEES.—Yuma, Ariz.—The U. S. Reclamation Service has been authorized to construct the levees on the California side of the Colorado River, Yuma irrigation project, by force account. This action was necessary by reason of the fact that if advertisement was made for bids and contracts awarded in the usual way the work would be delayed until after the spring floods. The estimated cost of building the levees is $115,000.

MONUMENT. — Baltimore, Md. — We are officially advised regarding the monument to be erected to Francis Scott Key, the composer of the "Star Spangled Banner," that "design is to be executed by A. Mercié, of Paris. It will be some time before even a definite design is determined upon and perhaps a year or 18 months before there will be anything thought of arranging for the stonework in connection with the project." Estimated cost, $25,000. The monument will be erected at Eutaw Place and Lanvale St. Theodore Marburg, 14 Mt. Vernon Place, West, Baltimore, is interested.

COAL DOCK.—Duluth, Minn.—The Duluth, Missabe & Northern Ry. Co. has awarded contract to the BARNETT & RECORD CO., Lyceum Bldg., for the construction of a coal dock east of Ore Dock No. 1 at West Duluth. The dock will have a capacity of 300,000 tons of coal. The equipment will consist of three hoisting towers, one reloading bridge and 800 lin. ft. storage pockets. The complete operation of the dock will be electrical, and the power will be furnished by the Great Northern Power Co., of Duluth. The dock will be ready to receive coal about Aug. 1. Cost, about $100,000. H. L. Dresser, Duluth, is Ch. Engr. of the D., M. & N. Ry. Co.

QUAY WALLS.—Charleston, S. C.—Bids are asked at the Bureau of Yards and Docks, Navy Dept., Washington, until 11 a. m., March 30, for constructing concrete quay walls at the navy yard, Charleston, S. C. The work consists of two concrete quay walls on either side of the entrance to the new dry dock. The walls are reinforced with plain steel bars, and a portion of the work has a facing of granite ashlar. The walls will have to be constructed dry, within cofferdams, the walls being about 45 ft. deep, and having a total length of about 275 ft. Estimated cost, $120,000. Specifications are on file at office of Engineering News, New York. H. H. Rousseau, Ch. of Bureau.

STEEL SCOW.—Chicago, Ill.—The Great Lakes Dredge & Dock Co., Chamber of Commerce Bldg., Chicago, has let a contract to the MANITOWOC DRY DOCK CO., of Manitowoc, Wis., for the [illegible]struction of what is to be the large[illegible] scow ever built on the lakes. The [illegible]ost will be about $100,000. It will be [illegible] especially for the handling of stone, [illegible] will be used largely on crib and bre[illegible]r construction work, where the st[illegible] handled are large and it is required th[illegible]he scows be constructed especially for [illegible] work. The new scow is to be 200 ft. [illegible] 38 ft. beam and 13 ft. depth. This [illegible] it much longer than any scow ever b[illegible] on the lakes, it is said.

NAVAL SUPPLIES.—Wa[illegible]on, D. C.—Bids are asked by the Bu[illegible] of Supplies and Accounts, Navy Dept., [illegible] 10 a. m., March 19, for furnishing [illegible] supplies at various navy yards, as follow[illegible] Boston, Mass.—Schedule 481: copper rive[illegible] Sch. 483: air and high-speed drills, taps, [illegible]rdware and tools; Sch. 484: copper pip[illegible] Sch. 485: bar steel. At naval torpedo [illegible], Newport, R. I.—5,000 ft. irido-platinum wire. At New York, N. Y.—Sch. 482: su[illegible] hose; Sch. 484: sheet copper, copper tu[illegible]; Sch. 48[illegible]: steel billets, beams, and floor plates; Sch. 486: gaskets, asbestos, and wire insertion packing; Sch. 487: fire tiles for boilers, iron cement. At Naval Academy, Annapolis, Md.—A quantity of iron pipe and fittings and valves. Applications for proposals should refer to Schedule 474. At Norfolk, Va.—Sch. 480: twist drills; Sch. 48[illegible]: copper tubing, etc.; Sch. 485: steel propeller shaft; Sch. 486: rubber hose. At Pensacola, Fla.—A quantity of magnet wire and electrical supplies. Applications for proposals should refer to Schedule 467. At New Orleans, La.—Sch. 465: terra cotta and iron pipe and fittings, hydrants, manhole covers, etc., hardware and tools, melting furnace, etc., pig lead, galvanized sheet steel, steel shapes; Sch. 466: brick, yellow pine, etc. E. B. Rogers, Paymaster-Gen., U. S. N.

PIER, DREDGING.—Sewells Point, Va.—The Tidewater Ry. Co. has awarded contract to the P. SANFORD ROSS CO., 277 Washington St., Jersey City, N. J., for dredging channels along the sides of proposed pier, and for constructing bulkhead, behind which will be deposited the dredged material, making new land, which will extend about 1,000 ft. This material will be used also for leveling up low spots in land further back. The McLEAN CONTRACTING CO., Maryland Trust Bldg., Baltimore, Md., has contract to construct proposed pier. There will be steel piles on concrete foundations. Wooden fenders will be constructed for use of ships. Contracts for superstructure and shed of pier have not been let. H. Fernstrom is Ch. Engr. for Tidewater Ry., at Norfolk, Va.

TELEPHONE SYSTEM.—Chicago, Ill.—The Chicago & Western Telephone Co., the concern organized by the independent interests to take over the Illinois Tunnel Co.'s automatic service, will be ready to begin business in the local field this month. It was announced yesterday that the new company has completed its engineering plant, and that bids for the building work probably will be called for next week. The contracts will aggregate an expenditure of several million dollars, and will require about five or six years to complete the new system. The independents have agreed among themselves to install 100,000 telephones. Three companies—to be known as the Chicago, Milwaukee & Northern Long Distance Telephone Co.; the Chicago, Indiana & Eastern Long Distance Telephone Co., and the Chicago, St. Louis & Western Long Distance Telephone Co.—have been incorporated, each with a nominal capital of $5,000. They are controlled by the Chicago & Western Telephone Co., and will form the connecting links between the independent long distance companies seeking entrance into Chicago.

U. S. POSSESSIONS AND CUBA.

The names of parties awarded contracts are printed in capital letters.

LUMBER.—Panama.—The Isthmian Canal Commission, Washington, D. C., has awarded to the ENSIGN LUMBER CO., Jacksonville, Fla., contract for furnishing about 1,800,000 ft. B. M. of prime yellow pine lumber, at $46,247.

CRANES.—Panama.—The Gen. Purchasing Officer of the Isthmian Canal Commission, Washington, D. C., has awarded to the MORGAN ENGINEERING CO., Alliance, Ohio, contract for furnishing three single-trolley electric cranes under Circular 347, opened Jan. 18, at $12,545.

LUMBER.—Panama.—The Isthmian Canal Commission, Washington, D. C., has received requisitions from the Isthmus calling for over 4,000,000 ft. B. M., of No. 1, long leaf yellow pine, as follows: 1,100,000 ft. B. M., S. 4 S.; 1,500,000 ft. B. M., S. 1 S.; 375,000 ft. B. M., S. 2 S.; 100,000 ft. B. M., rough; 500,000 ft. 6-in. drop siding; 500,000 ft. 6-in. flooring; 100,000 4-in. rift or edge grain flooring. Specifications will be out under Circular 355 in a few days.

LEPROSY STATION.—Hawaii.—Bids were opened March 4 at office of Supervising Architect of the Treasury, Washington, D. C., for the construction of a station for the investigation of leprosy at Molokai, Hawaii. The following bids were received: John Duggan, Honolulu, $129,562, 18 months; Lucas Bros., Honolulu, $180,392, 18 months; H. De Fries, Honolulu, $204,000, June 1 1908. This is the third time that bids have been called for for this hospital. Upon the first occasion the bids were all over the appropriation; upon the second, no bids were received.

EXPLOSIVES.—Panama.—David W. Ross, Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., has awarded to the E. I. DuPONT de NEMOURS POWDER CO., 170 Broadway, New York, contract for furnishing a large quantity of dynamite, at $98,310. Their original bid was on 600,000 lbs. at $66,810, but the quantity was increased in accordance with a cable request from the Isthmus, approved by the Secretary of War. The class on 200,000 lbs. black powder, opened the same day, was cancelled. The DuPont Co. also received award of 40,000 electric exploders at $2,813

ENGINEERING SUPPLIES.—Panama.—Bids are asked until 10.30 a. m., March 18, under Circular 354, by David W. Ross, Gen. Purchasing Officer, Isthmian Canal Commission, Washington, D. C., for the following engineering supplies: Repair parts for steam shovels: one countersinking radial drill, two cold saws, two automatic saw grinders, six carborundum wheels, two pneumatic geared hoists, 1½-ton and 5-ton capacity, respectively; sledge handles, 417 doz. shovels, lining bars, claw bars, rail tongs, track jacks, single air gages, a large quantity of cone-head and countersunk rivets, 100,000 ft. wrought-iron pipe, black, in sizes from ⅛-in. to 12-in., globe valves, turn-buckles, draftsmen's materials, etc.

STEAM SHOVELS.—Panama.—Bids are asked until 10.30 a. m., March 18, by the Isthmian Canal Commission, Washington, D. C., for 22 steam shovels, as follows: 15 type "B", not less than 95 nor more than 100 tons weight, dipper capacity 4½ to 5 cu. yds., height from point of boom to rail 28 to 30 ft., height of A frame, 18 to 20 ft. above the rail, clear height of lift above rail, not less than 17 ft. 6 in., width of cut at 8-ft. elevation, 54 ft. to 60 ft., track gage, 5 ft.; seven type "C", not less than 40 nor more than 50 tons, dipper capacity 1½ to 1¾ cu. yds., height from point of boom to rail, 23 ft. to 25 ft., height of A frame above rail, 16 to 18 ft., clear height of lift above rail, not less than 14 ft., width of cut at 8-ft. elevation, not less than 48 ft. nor more than 50 ft. Price to be quoted f. o. b. Colon or La Boca, C. Z.

ENGINEERING SUPPLIES.—Panama.—Bids are asked until 10.30 a. m., March 26, at the office of David W. Ross, Gen. Purchasing Officer, Isthmian Canal Commission, Washington, D. C., for a quantity of engineering supplies, as follows: Machines for machine shop—one pipe-threading and cutting machine, one double-head bolt cutter, one horizontal boring machine, one universal cutter and tool grinder, one floor grinder, two sliding-head drill presses, one universal radial drill, two screw-cutting engine lathes, one screw-cutting engine lathe, one turret lathe, one tool room engine lathe, one round swivel-base planer chuck, one rotary splitting gear, four duplex lever punches, one double punch and shear machine, flat punches and dies, furniture, 250 ranges and 50 boilers. Lumber—No. 1 long leaf yellow pine, as follows: 1.100.000 ft. B. M., S. 4 S., 2,000,000 ft. B. M., S. 1 S., 300,000 ft. B. M., S. 2 S., 100,000 ft. B. M., rough lumber, 500,000 ft. drop siding, 500,000 ft. B. M., flooring, T. & G., 100,000 ft. B. M., rift or edge grain flooring.

ENGINEERING SUPPLIES.—Panama.—Bids were opened March 1, at the office of the General Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for a quantity of engineering supplies under Circular No. 352, of which the following are of special interest: (a) 5,000 ft. w.-i. pipe, extra strong, 10-in., (b) 337,000 ft. galvanized iron pipe, of sizes from ¼ in. to 5 in. Bids were as follows: Cornell & Underhill, 47 Beach St., New York, (a) $12,144, (b) $59,843, time, 60 days.; E. F. Keating Co., 446 Water St., New York, (b) $60,171, time, commence in 30 days; Youngstown Sheet & Tube Co., 1733 Land Title Bldg., Philadelphia, (a) $12,400, shipment, 30 days; United States Steel Products Exports Co., (a) $10,425, 90 days, (b) $60,211, 120 days; Cuyler & Mohler, 611 William St., Baltimore, (a) $20,000, 75 days, (b) $68,720, 120 days.

CHINESE LABORERS.—Panama.—Formal announcement has been made by the Secretary of War that the bids received on Sept. 20, 1906, for furnishing Chinese laborers for the Canal have been rejected and the bidders have been informed that they are at liberty to take back the securities they put up. Soon after the bids were opened, proposals were asked on the contract for the construction of the Canal and the matter of Chinese labor was held up pending the settlement of the larger question. When it was finally decided to build the Canal under Army supervision, the Administration determined that it would be unfair to hold any longer the labor bids, as it would necessarily be some time before the new chief engineer and his assistants would be able to determine whether or not such labor would be used. It is possible that at a later time proposals may be asked again in this matter.

MEXICO.

The names of parties awarded contracts are printed in capital letters.

ICE PLANT.—Tampico, Tamaulipas.—The Impavida Company, of Guanajuato, Gto., will soon commence the construction of a 40-ton ice plant in the city of Tampico.

STEEL RAILS. — Chihuahua, Chih. — The Compania Tranvia de Chihuahua of Chihuahua has ordered A. C. Nash, Gen. Mgr., to negotiate for ten miles of 80-lb. steel rails.

MARKET. — Jiminez, Chihuahua. — Francisco Portillo, Jefe Politico of Jiminez, Chih., is taking steps to build a new and modern market in that city, to replace the one recently burned.

STREET CAR LINE.—Pedricena, Velardena, Coahuila.—Carlos Mechaud, of Pedricena, will build a street car line connecting that town with Velardena. The line will be about six miles long.

HYDRO-ELECTRIC PLANT. — Jalisco. — Carlos Romero, of Etzatlan, Jalisco, states that he will commence work soon on a hydro-electric plant to be installed on the Jora River, a tributary of the Santiago River, in the state of Jalisco.

STEEL BRIDGE.—Sinaloa.—G. A. Stranahan, Engr. of Culiacan, Sinaloa, is in charge of the construction of a 750-ft. span steel bridge, which is to be erected across the Tamazuela River, near Culiacan. The material for the bridge has been contracted for.

GAS PLANT.—Parral, Chih.—It is reported that R. S. Lowe & Co., of San Francisco, Cal., have arranged to take over the concession for a gas plant in the city of Parral, Chih. They will, it is said, incorporate a company with a capital of $500,000 gold, to build the plant.

RAILWAY.—. Aguascalientes, Ags. — There is a project to construct a narrow-gage railway from the city of Aguascalientes to the Ledesma Hacienda, in the state of Jalisco. The length of the line will be about 32 miles. The hacienda is the property of Rincon Gallardo.

· MINING MACHINERY.—Michoacan. — The Santa Casilda Copper Co. is having plans made for a complete milling and concentrating plant to be operated by hydraulic power, and with a capacity of at least 200 tons daily, to be erected at the company's property, located about 25 miles south of Uruapan, state of Michoacan.

WATER POWER AND IRRIGATION.—Culiacan, Sin.—Mrs. Alejandro de Redo has secured from the Department of Fomento a concession to use the waters of the Tamazuela River for irrigation purposes, and for motive power for El Coloso cotton mills, in Culiacan, Sin. The right to divert 1,192 liters of water, per second, is granted.

RAILROAD.—Mexico City.—We are officially advised that the Mexico, Oaxaca & Yucatan Ry. Co. is preparing to put the line from Mexico City to Oaxaca, 325.4 miles, under construction and a construction company is now being formed for the purpose. The work is in a mountain country and pretty heavy. Prices are wanted on rails, track fastenings, ties and bridge timbers, f. o. b. dock Vera Cruz. Walter G. Seaver, 10 Wall St., New York, N. Y., is Pres. and Gen. Mgr.

RAILWAY BRIDGE. — Chihuahua. — Work is soon to be started on the new bridge across the Jesus Maria River, north of the city of Chihuahua, on the Mexican Central. The bridge is to be 340 ft. long. The Central contemplates building a number of bridges on the main line, replacing old structures. Lewis Kingman, City of Mexico, is Ch. Engr.

RAILWAY.—Guaymas-Guadalajara. — It is reported that GRANT BROS., railway contractors of Los Angeles, Cal., have contract for construction of the entire Guadalajara-Guaymas extension of the Southern Pacific. They are now building the extension in the state of Sonora. It is expected construction on the Guadalajara end of the line will be commenced within a few months.

RAILWAY. — Durango-Guadalajara. — The location of the International Railroad from Durango to Guadalajara is being pushed so as to commence construction as soon as possible. It is desired to complete the line in advance of the Southern Pacific coast extension to the latter city. As planned, the road probably will run from Durango to Gutierrez, connecting with the Central at the latter point, then south near Zacatecas and Aguascalientes to Guadalajara. The road will open up an extensive territory which has had no transportation facilities, and will be of great value, especially in carrying ore to the smelters.

COVERING RIVER.—Guadalajara, Jal.—The work of covering the San Juan de Dios River, for its course through the city of Guadalajara, will be commenced soon. The stream is a small one, requiring a channel of only about 16 ft. in width to be covered. The work is estimated to cost $300,000, and will be done by the State Government. Col. Miguel Ahumada is Governor of Jalisco, Guadalajara being the capital city.

RAILWAY.—Durango.—Walter C. Palmer, Apartado 17, Zacatecas, is reported to have secured sufficient capital to insure the commencement of construction of a railway, for which he holds the concession, from the city of Durango, connecting with the International line, to the town of Gutierrez, to connect wtih the Mexican Central. The road will be about 185 miles long, and is estimated will cost about $3,000,000.

IRRIGATING CANAL.—Sinaloa.—The Sinaloa Land & Water Co. is to build an irrigating canal, commencing at a point on the Culiacan River, a few miles south of the city of Culiacan, the capital of the state, and terminating at the Yevavito Hacienda. The canal will be of a capacity to carry sufficient water to irrigate 50,000 acres, in addition to the amount required for the Yevavito property. The cost of the work is estimated at $2,000,000, and construction will commence in April.

RAILWAY. — Guaymas-Tonicho, Sonora. — The Department of Communications has amended the concession granted on March 5, 1905, to David Richardson for the construction of a railway branch of the Guaymas & Tonicho Ry. to La Bufa. According to the amendment at least ten kilometers of road must be completed on Sept. 28, 1909, and not less than ten additional kilometers each year until the completion of the branch, which must be ready for inauguration on March 28, 1912.

CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

WATER-WORKS SYSTEM.—Seattle, Wash.—Bids were received on Feb. 26 for the construction and completion of certain additions to the existing water-works owned and controlled by the city of Seattle. These additions include: Subdivision 1—A pressure pipe line from the present settling basin on Cedar River to a point west of the Volunteer Park Reservoir in the city, about 28½ miles in length. Subdivision 2—Grubbing the site for and the earthwork construction of the Beacon Hill Reservoir. Subdivision 3—Intermediate reservoir located on the northerly city limits. Contract will consist of clearing and grubbing the site for, and the earthwork construction of, a 50,000,000-gallon reservoir. Separate bids will be received and separate contracts will be let for each subdivision. C. B. Bagley, Secy. Bd. Public Works. The bidders were: (A) International Contract Co., 738 New York Block, Seattle; (B) Robert Wakefield, Portland, Ore.; (C) Puget Sound Bridge & Dredging Co., 95 Yesler Way, Seattle; (D) H. W. Hawley & L. C. Lane, 615 Fifth Ave., Seattle; (E) C. J. Erickson, 1512 Fifth Ave., Seattle; (F) A. C. Goerig, 1802 16th Ave., Seattle; (G) E. M. Jones & C. W. Ide, 918 Twelfth Ave., North Seattle.

Subdivision 3—

Green Lake Low Service Reservoir.

(G)—20 acres clearing and grubbing, $110 an acre; 200 cu. yds. solid rock, $2.70 a cu. yd.; 130,000 cu. yds. "other material," 42 cts.; 14,000 sq. yds. slope dressing, 14 cts.; 1,000 lin. ft. tile drain, 73 cts.; 1,000 lin. ft. 6" sewer, 39 cts.; 1,500 lin. ft. 8" sewer, 51 cts.; total, $61,185.

Subdivision 1—30" by-pass at settling basin:	(A)	(B)	(C)*
1 connection at well hole, lump sum	$100.00	$70.00	$150.00
1 24" gate valve, complete in place	525.00	452.00	470.00
1 4" blow-off, with 4" gate valve, complete in place	32.50	43.00	40.00
18 lin. ft. of 4" Kalamein pipe, per lineal foot in place	.65	.60	1.00
Connection at settling basin:			
1 64" sluice gate with attachments, complete in place	1,545.00	1,630.00	1,490.00
15 cu. yds. of concrete, per cu. yd. in place	10.00	18.00	15.00
Venturi meters:			
1 Venturi meter in 60" pipe, complete in place, as specified	4,500.00	3,700.00	3,650.00
1 Venturi meter in 51½" pipe, complete in place, as specified	4,200.00	3,400.00	3,340.00
Pressure pipe:			
50 acres of clearing, per acre	100.00	110.00	100.00
30 acres of clearing and grubbing, per acre	450.00	475.00	400.00
10,000 cu. yds. of solid rock excavation, trenching, hauling and back-filling, per cu. yd	3.25	2.75	3.00
24,000 cu. yds. of loose rock excavation, trenching, hauling and back-filling, per cu. yd	1.00	.80	.90
306,000 cu. yds. of "other material" excavation, trenching, hauling and back-filling, per cu. yd	.75	.64	.65
40,000 ft. B. M. timber in culverts and bridges, per M. ft. B. M., in place	40.00	50.00	40.00
2,000 lbs. of wrought iron bolts, per pound, in place	.07	.07½	.07
1,000 lin. ft. of 12" sewer pipe in place, per lin. ft	1.15	1.25	1.20
1,000 lin. ft. of 16" sewer pipe in place, per lin. ft	1.75	1.75	1.80
10,000 ft. B. M. lumber necessarily used in R. R. crossings, per M. ft. B. M	45.00	50.00	45.00
Stave pipe:			
5,500,000' B. M. lumber in staves, per M. ft. B. M. in 60, 51½, 48, 42 and 30" pipes	52.00	49.50	50.00
7,500,000 lbs. of steel in bands, if furnished by the contractor, per lb. in place on 60, 51½, 48, 42 and 30" pipes	.05	.051	.04⁸⁵/₁₀₀
8,300,000 lbs. material in bands and saddles, if furnished by the city, per lb. in place on 60, 51½, 48, 42 and 30" pipes	.02	.02	.01⁷/₁₀
38 6" blow-offs with 6" gate valve, and cast-iron extension valve box, each in place	70.00	62.00	50.00
2,000 lin. ft. of 6" Kalamein waste pipe, per lineal ft. in place	1.25	1.50	1.50
40 4" air valves with 4" gate valve, each in place	48.00	60.00	65.00
350 lin. ft. 3" galvanized iron stand-pipes in place, per lin. ft	1.10	1.15	1.00
13 3" service cocks, each in place	5.25	5.80	7.00
32,000 lbs. cast-iron fittings, per lb., in place	.07⁸/₁₀	.08½	.09
1 42" gate valve, with brick chambers, in place	2,300.00	1,950.00	2,000.00
1 36" gate valve, with brick chambers, in place	2,060.00	1,600.00	1,590.00
51½ and 48" riveted steel pipe:			
1,660 lin. ft. of 51½" steel pipe ⅜" in thickness, per lin. ft., in place	14.00	16.00	14.50
970 lin. ft. of 51½" steel pipe ⁷/₁₆" in thickness, per lin. ft., in place	16.30	18.50	16.75
940 lin. ft. of 51½" steel pipe ½" in thickness, per lin. ft., in place	19.10	20.40	18.75
3,950 lin. ft. of 51½" steel pipe ⁹/₁₆" in thickness, per lin. ft., in place	21.00	23.00	21.00
2,150 lin. ft. of 48" steel pipe ⁵/₁₆" in thickness, per lin. ft., in place	11.50	13.00	11.65
830 lin. ft. of 48" steel pipe ⅜" in thickness, per lin. ft., in place	13.00	15.00	13.50
18 14" × 16" manholes, each in place	72.00	65.00	60.00
1 4" air valve, with 4" gate valve, each in place	48.00	60.00	50.00
3 6" blow-offs, with 6" gate valve, and cast-ron extension valve box, each in place	48.00	55.00	55.00
1,000 ft. of 6" Kalamein waste pipe, per lin. ft., in place	1.25	1.50	1.50
Black River crossing:			
140 lin. ft. of 51½" submerged steel pipe, ⁹/₁₆" in thickness, in place, inclusive of excavation and refilling trench in Black River, per lin. ft	30.00	50.00	40.00
Waste pipe to Lake Union:			
1,400 lin. ft. of 30" Kalamein pipe, in place, per lin. ft. (including excavation)	15.50	17.00	15.75
1,620 lin. ft. of 24" Kalamein pipe, in place, per lin. ft. (including excavation)	11.00	12.30	10.90
1,400 lin. ft. of 30" lock bar steel pipe, ¼" in thickness, in place, per lin. ft. (including excavation)	8.90	10.00	9.00
1,620 lin. ft. of 30" lock bar steel pipe, ¼" in thickness, in place, per lin. ft. (including excavation)	8.00	9.00	8.20
1,400 lin. ft. 30" riveted steel pipe, ¼" in thickness, in place, per lin. ft. (including excavation)	9.30	10.30	9.50
1,620 lin. ft. 24" riveted steel pipe, ¼" in thickness, in place, per lin. ft. (including excavation)	8.40	9.25	8.50
Tunnels:			
700 lin. ft. of tunnel, 6½' × 6½' in the clear, completed and backfilled, per lin. ft	19.00	16.00	15.75
150 lin. ft. of tunnel 7' × 7' in the clear, completed and backfilled, per lin. ft	19.00	26.00	24.00
Replacing pavements:			
100 sq. yds. macadam pavement taken up and replaced, per sq. yd	1.00	.50	.75
700 sq. yds. asphalt pavement, taken up and replaced, per sq. yd	4.00	3.30	3.00
Totals	$1,322,921	$1,197,636	$1,163,458

*This company will be awarded contract.

Subdivision 2—Beacon Hill Reservoir:	(D)	(F)
44 acres grubbing, per acre	$300.00	$250.00
Excavation:		
200 cu. yds. solid rock, per cu. yd	1.50	1.00
310,000 yds. of "other materials" deposited in embankment and rolled or deposited in spoil banks, per cu. yd	.58	.64½
25,000 sq. yds. slope dressing, seeded, per sq. yd.	.30	.15
1,000 lin. ft. tile drain in place (exclusive of excavation), per lin. ft.	.25	.12
1,000 lin. ft. of 6" sewer pipe, in place (exclusive of excavation), per lin. ft.	.50	.50
1,500 lin. ft. 8" sewer pipe, in place (exclusive of excavation), per lin ft.	.60	.75
Total	$202,450	$216,645

Subdivision 3—Green Lake Reservoir:	(D)	(E)	(G)
32 acres, clearing and grubbing, per acre	$300.00	$250.00	$110.0
Excavation:			
200 cu. yds. solid rock, per cu. yd	1.50	1.00	2.7
160,000 cu. yds. of "other material" deposited in embankment and rolled or deposited in spoil banks, per cu. yd	.58	.50	.4
15,000 sq. yds. slope dressing seeded, per sq. yd	.30	.30	.1
1,000 lin. ft. tile drain, in place (exclusive of excavation), per lin. ft.	.25	.50	.7
1,000 lin. ft. of 6" sewer pipe, in place (exclusive of excavation), per lin. ft.	.60	.60	.3
1,500 lin. ft. of 8" sewer pipe, in place (exclusive of excavation), per lin. ft.	.60	.75	.5
Totals	$106,250	$92,675	$77,45

•SANITARY SEWERS.—Orangeburg, S C.—The following are the bids opened on Feb. 28 by the Sewerage Commissioners for furnishing and constructing about ten miles of sanitary sewers: (A) Berghaus & Moffitt, Harrisburg, Pa.; (B) Bryan & Co., Jacksonville, Fla.; (C) Erbelding Co., Augusta, Ga.; (D) Frederic Minshall, Abbeville, S. C.; (E) Reliable Construction Co., Orangeburg, S. C.; (F) Ebaugh & Ebaugh, Greenville, S. C. Contract awarded to BERGHAUS & MOFFIT. Edward Hawes, Jr., is City Engr.

BIDS RECEIVED ON FEB. 28 FOR CONSTRUCTING SANITARY SEWERS, ORANGEBURG, S. C.

	ft. ft.	(A)	(D)	(E)	(C)	(B)	(F)
8-in. sewer, 3,892 ft.	0— 6	$0.41	$0.38	$0.51	$0.39	$0.40	$0.44
14,853 ft.	6— 8	.44	.45	.56	.43	.50	.50
8,218 ft.	8—10	.53	.55	.61	.58	.67	.67
907 ft.	10—12	.67	.70	.81	.75	.87	.82
180 ft.	12—14	1.05	.90	.91	1.00	1.20	1.60
10-in. sewer, 1,512 ft.	0— 6	.49	.49	.56	.47	.47	.53
2,995 ft.	6— 8	.54	.58	.61	.52	.56	.63
2,858 ft.	8—10	.62	.70	.66	.67	.75	.86
1,407 ft.	10—12	.74	.85	.86	.84	.95	1.05
380 ft.	12—14	1.10	1.20	.96	1.25	1.28	1.50
80 ft.	14—16	1.52	1.55	1.26	1.50	1.85	2.75
12-in. sewer, 100 ft.	0— 6	.60	.60	.61	.70	.60	.68
1,728 ft.	6— 8	.62	.74	.66	.81	.70	.79
1,186 ft.	8—10	.71	1.05	.71	.95	.91	1.00
660 ft.	10—12	.87	1.52	.91	1.15	1.32	1.15
168 ft.	12—14	1.25	1.90	1.01	1.30	1.50	2.00
6 ft.	14—16	1.90	2.30	1.31	1.70	2.50	4.50
6 ft.	16—18	2.40	2.80	2.01	2.00	2.60	5.00
6 ft.	18—20	2.70	3.40	2.51	2.20	2.90	6.00
26 ft.	20—22	2.97	4.00	3.01	2.30	3.50	7.00
20 ft.	22—24	3.93	5.00	3.51	2.60	3.75	8.00
15-in. sewer, 1,072 ft.	0— 6	.84	.93	.72	.90	.78	.90
2,130 ft.	6— 8	.89	1.08	.77	1.05	.89	1.00
1,144 ft.	8—10	1.08	1.37	.82	1.15	1.10	1.20
700 ft.	10—12	1.45	1.72	.92	1.45	1.50	1.50
500 ft.	12—14	1.76	2.10	1.12	1.60	1.68	2.10
390 ft.	14—16	2.23	2.40	1.42	1.85	2.50	3.10
18-in. sewer, 490 ft.	0— 6	1.06	1.08	.86	1.10	.98	1.15
469 ft.	6— 8	1.12	1.30	.91	1.31	1.10	1.25
180 ft.	8—10	1.27	1.50	.96	2.00	1.35	1.50
204 ft.	10—12	1.58	1.90	1.16	2.50	1.80	1.90
20-in. sewer, 810 ft.	0— 6	1.34	1.35	1.06	1.25	1.18	1.35
610 ft.	6— 8	1.40	1.58	1.11	1.60	1.30	1.50
610 ft.	8—10	1.47	1.79	1.16	1.85	1.58	1.75
120 ft.	10—12	1.88	2.25	1.36	2.20	2.00	2.15
50 ft.	12—14	2.20	2.75	1.46	2.75	2.50	2.60
12-in. tunnel, 100 ft.		2.35	6.00	3.00	3.00	3.00	5.50
5-in. chimney, 500 ft. vertical		.13	.10	.10	.10	.10	.14
Tons c.-i. pipe, 10		40.00	50.00	50.00	55.00	35.00	60.00
Manholes, 92.	0-ft.—10-ft	38.00	37.50	82.00	40.00	35.00	38.00
" 11.	10-ft.—15-ft	48.00	50.00	92.00	60.00	45.00	55.00
Flush-tanks, 26		64.00	70.00	100.00	65.00	55.00	75.00
Lamp-holes, 4		7.50	10.00	25.00	8.00	10.00	15.00
8-in. branches, 1,096		.42	.40	.75	.38	.40	.40
10-in. " 288		.53	.60	1.10	.56	.60	.57½
12-in. " 107		.70	.80	1.50	.75	.75	.75
15-in. " 20		1.10	1.20	2.25	1.20	1.25	1.20
28-in. " 14		1.35	2.00	3.00	1.75	1.75	1.60
20-in. " 24		2.20	3.50	3.75	2.00	2.25	2.25
Bulkhead, 1		48.00	100.00	90.00	50.00	25.00	125.00
Lumber, 25 M		15.00	25.00	16.00	30.00	20.00	25.00
Underdrain, 12,000 ft.		.13	.30	.07	.20	.12	.28
Ex. brick masonry, 100 cu. yds.		14.00	10.00	12.50	8.00	10.00	10.00
Ex. concrete " 100 cu. yds.		9.00	8.00	13.50	7.00	7.00	8.00
Ex. earth exc., 100 cu. yds.		.50	.50	.35	.50	1.00	.50
Totals		$45,118.00	$51,317.00	$51,836.00	$48,372.00	$47,664.00	$54,456.00

•CAST-IRON WATER PIPE.—Springfield, Mass.—Bids were received on March 2 by the Board of Water Commissioners for supplying a quantity of c.-i. water pipe for improvements in the distribution system during 1907. Delivery is guaranteed early in the season, and this work will be carried out during the summer. The aggregate amount of the lowest bidder is $76,995. (The name of the successful bidder is marked with a star.) Prices on gates and hydrants for this work probably will be asked for soon. Elbert E. Lochridge is Engr., Water Dept. The bids were as follows; (AA) Fred. A. Houdlette, (BB) U. S. Cast Iron Pipe & Foundry Co., (CC) R. D. Wood & Co., (DD) Donaldson Iron Co., (EE) M. J. Drummond & Co., (FF) John Fox & Son, (GG) Chas. Miller & Sons Co., (HH) American Cast Iron Pipe Co.:

(PRICES BID FOR 2,000 LB.-TON.)

	6"	8"	10"	12"	30"	36"	Special castings.
Tons	146	168	52	93	1,134	40	80,000 lbs.
•(AA)	$34.75	$34.75	$33.80	$33.80	$33.80	$33.80	$0.03
(BB)	35.30	35.30	34.50	34.50	33.90	33.90	.03
(CC)	37.30	37.50	36.50	36.50	35.50	35.50	.03¼
(DD)	35.98	34.64	34.64	34.64	.....	.....	.03
(EE)	36.20	34.75	34.75	34.75	.....	.....	.03
(FF)	36.50	35.40	34.50	34.50	.....	.....	.03⅛
(GG)	35.20	35.20	35.20	35.20	.....	.....	.03
(HH)	38.25	37.75	37.75	37.75	.....	.....	.03¼
Steel:							
•(AA)					per ft. 4.50	per ft. 6.60	

READERS' WANTS

If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.

Also ask for our BUYERS' GUIDE

METAL PACKAGES.—Chicago, Ill.—The Parker-Washington Co. writes us that it is desirous of communicating with parties manufacturing metal packages for tar, pitch or asphalt.

WIRE SPRINGS.—Wilmington, Del.—John A. Hendoff, 1906 Scott St., Wilmington, Del., writes us that he is in the market for small flat and round steel wire springs.

BARREL SHOOKS.—Obras de Pavimentacion, Veracruz.—The Mexican Construction & Engineering Co., Ltd., Apartado 169, Obras de Pavimentacion, Veracruz, V. C., Mex., writes us that it desires to communicate with firms manufacturing barrel shooks.

SEWAGE LIFT.—State College, Pa.—Chas. D. Conklin, Jr., State College, Pa., desires to communicate with firms manufacturing sewage lifts.

COAL MINING MACHINERY.—Cooper, Tex.—We are informed that L. A. Watelsky, Box 19, Cooper, Tex., is in the market for coal mining machinery.

CIVIL SERVICE EXAMINATIONS

SCIENTIFIC ASSISTANT IN VETERINARY ZOOLOGY (MALE).—Washington, D. C.—The U. S. Civil Service Commission announces an examination on March 20-21, to secure eligibles from which to make certification to fill a vacancy in the position of Scientific Assistant Veterinary Zoology, Bureau of Animal Industry, Dept. of Agriculture, at $840 a year, and similar vacancies as they may occur in that department. Men only will be admitted to this examination. As no eligibles resulted from the examination held for this position in October, 1906, qualified persons are urged to apply. Age limit, 20 to 40 years on date of the examination. Application form 1312.

TRIANGULATION AIDS.—Washington, D. C.—An examination will be held on March 20 by the U. S. Civil Service Commission to secure eligibles from which to make certification to fill three vacancies in the position of Triangulation Aid in the Geological Survey, at salaries ranging from $900 to $1,200 a year, according to the qualifications shown, and vacancies as they may occur in any branch of the service requiring similar qualifications. A good school education and not less than three years' good experience in the use of transit and level in field work are requisite to eligibility. A technical degree in civil engineering will be accepted as equivalent to two years of these three. The positions of primary triangulator, primary traverseman, and precise levelman will be filled from this examination. Persons, therefore, who have not had the required training and experience should not apply for this examination. Age limit, 20 years or over. Application Form 1312.

STRUCTURAL STEEL DRAFTSMAN.—New York, N. Y.—An examination will be held on April 2, at 10 a. m., by the Municipal Civil Service Commission, 299 Broadway, for position of Structural Steel Draftsman. Applications will be received until 4 p. m., March 25. Vacancies exist in the Department of Bridges and Board of Education. The salary is $1,500 a year and up. The minimum age is 21 years. Frank A. Spencer, Secy.

ELECTRICAL ENGINEER AND DRAFTSMAN.—Washington, D. C.—On March 27-28-29 an examination will be held by the U. S. Civil Service Commission to secure eligibles from which to make certification to fill a vacancy in the position of Electrical Engineer and Draftsman in the Supervising Architect's Office, at $1,200 a year, and several vacancies in this position as they may occur during the period of eligibility, at prices ranging from $1,200 to $1,600 a year. Age limit, 20 years or over. Application Form 1312.

ASSISTANT ENGINEER.—New York, N. Y.—The Municipal Civil Service Commission, 299 Broadway, will hold an examination on April 4, at 10 a. m., for position of Assistant Engineer in Charge of Section, Board of Water Supply. Applications will be received until 4 p. m., March 25. Appointments will be made for work outside of the City of New York. Salary is $2,400 a year and over. Frank A. Spencer, Secy. (Advertised, Engineering News.)

INSPECTOR OF TEXTILE FABRICS.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on March 27 at Washington, D. C., Philadelphia, Pa., Brooklyn, N. Y., Boston, Mass., and Chicago, Ill., to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Inspector of Textile Fabrics, at $1,400 a year, in the Quartermaster's Department at Large. Applicants who have not had sufficient experience to entitle then to a rating of 70 per cent. or more on this subject will not be admitted to the examination. Applicants must indicate in their applications that they have a thorough knowledge of the various grades of wool and are good judges of the construction of textile fabrics, including the knitting and manufacture of underwear, and that they have a knowledge of the dyes used in the manufacture of textile fabrics. Each applicant should bring a pick glass for use in the examination. Applicants must furnish with their applications a certificate from a physician showing that they are free from color blindness. Age limit, 20 years or over. Application Form 1312. No application will be accepted unless properly executed and filed, in complete form, with the Commission at Washington prior to the hour of closing business on March 16. In applying for this examination the exact title as given at the head of this announcement should be used in the application.

CIVIL ENGINEER STUDENTS.—Washington, D. C.—An examination will be held on April 3-4 by the U. S. Civil Service Commission to secure eligibles from which to make certification to fill at least eight vacancies in the position of Civil Engineer Student, at $600 a year each, in the Office of Public Roads, Dept. of Agriculture, and other similar vacancies as they may occur in that department. Subsistence expenses, not to exceed 30 days on any one assignment, and all traveling expenses will be paid by the department. The object of this examination is to qualify young engineer students for a one-year graduate course in highway engineering. Part of the time will be devoted to laboratory and office work and study, and the remainder to practical road building in different parts of the United States, thus enabling the student to become familiar with all the branches in this line of work. Upon the expiration of the year's course the student may be promoted to an engineering position without further examination, such promotion being dependent upon individual merit and the needs of the service. As the Commission has experienced considerable difficulty in securing a sufficient number of eligibles for this position to meet the needs of the service, qualified persons are urged to apply. Age limit, 20 years or over. Applications will be received only from graduates in civil engineering from reputable engineering schools and graduating students. Failure to receive engineering degree by July 1, 1907, will disqualify for appointment in the United States Department of Agriculture. Application Form 1312.

ENGINEERING MATERIAL PRICES.

TRACK FASTENINGS—

Pittsburg, f. o. b. cars—Angle [illegible] 1.65 to 1.75 cts.; spikes, 2.40 to 2.50 [illegible] bolts, square nuts, 2.65 to 2.75 cts.; [illegible] hexagonal nuts, 2.80 to 2.90 cts.

RAILS, STEEL—

New York—at mill—New standard sections, $28; standard, second quality, [illegible] light sections 12 to 25 lbs., $31 to [illegible] old iron f. o. b. New York, $24.50 [illegible]; old steel, long lengths, $19.50 [illegible]; old steel, short pieces, $16.25 to [illegible]

Pittsburg—Standard sections, at [illegible] $28; standard, second quality, $27 to $28; light rails, 20 to 45 lbs., $32; [illegible] lb., $33; and 12-lb., $34 at mill.

STRUCTURAL MATERIALS—

New York—at tidewater—Beams and channels, up to 15-in., 1.84½ cts.; over 15-in., 1.84½ cts.; angles, 3 x 2 and up to 6 x 6, 1.84½ cts.; zees, 3-in. and larger, 1.89½ cts.; tees, 3-in. and larger, [illegible] cts.; steel bars, half extras, 1.74½ [illegible]

PLATES AND SHEETS—

New York—at tidewater—Sheared plates tank, 1.84½ to 1.94½ cts.; flange, 1.94½ to 2.14½ cts.; marine, 2.24½ to 2.44½ cts.; still bottoms, 2.14½ to [illegible] cts.; fire-box, 2.75 to 3.50 cts.

Pittsburg—Tank, ¼-in. thick and heavier, 1.70 to 1.80 cts.; black sheets, [illegible]-gage, 2.50 to 2.55 cts.; black sheets, [illegible]-gage, 2.60 to 2.65 cts.

IRON—

Pig Iron:

At New York—tidewater—

Northern—		
No. 1 X Foundry	$26.50 to	$27.00
No. 2 X Foundry	25.00 to	26.50
No. 2 Plain	24.50 to	26.00
Gray Forge	24.00 to	25.00
Basic	24.50 to	25.00
Virginia—		
No. 1 Foundry	$25.00 to	$25.50
No. 2 Foundry	24.50 to	25.50
Basic	22.80 to	24.00
Southern—		
No. 1 Foundry	$26.50 to	$27.00
No. 2 Foundry	26.00 to	26.50
No. 3 Foundry	25.50 to	26.00
No. 4 Foundry	24.50 to	25.00
No. 1 Soft	26.00 to	27.00
No. 2 Soft	25.50 to	26.00
Gray Forge	22.50 to	23.00
Mottled	22.00 to	22.50
At Chicago—		
Lake Superior Charcoal	$27.00 to	$27.50
Northern Coke Foundry, No. 1	26.00 to	26.50
Northern Coke Foundry, No. 2	25.50 to	26.00
Northern Coke Foundry, No. 3	25.00 to	25.50
Northern Scotch, No. 1	26.00 to	27.00
Ohio Strong Softeners, No. 1.	26.00 to	26.50
Ohio Strong Softeners, No. 2.	25.50 to	26.00
Southern Coke, No. 1	27.35 to	27.85
Southern Coke, No. 2	26.85 to	27.35
Southern Coke, No. 3	26.35 to	26.85
Southern Coke, No. 4	25.85 to	26.35
Southern Coke, No. 1 Soft	27.35 to	27.85
Southern Coke, No. 2 Soft	26.85 to	27.35
Southern Gray Forge	22.35 to	22.85
Southern Mottled	22.35 to	22.85
Malleable Bessemer	26.00 to	26.50
Standard Bessemer	25.30 to	25.80
Jackson Co. and Kentucky Silvery, 6%	30.30 to	30.80
Jackson Co. and Kentucky Silvery, 8%	32.30 to	32.80
Jackson Co. and Kentucky Silvery, 10%	34.30 to	34.80
At Pittsburg, f. o. b. cars—		
No. 2 Foundry	$24.50 to	$25.00
Gray Forge		20.85
Bessemer Iron	21.55 to	23.35
Ferro-manganese		75.00
Muck Bars	34.00 to	37.00
Iron Bars	1.80 to	1.85
Cut Nails		2.05

Cast-iron Pipe:

New York—Carload lots, net tons, 6-in., at tidewater, $34.50 to $35.

Chicago—4-in. water pipe, $37 to $38; 6-in. to 12-in., $36 to $37; over 12-in., $35 to $36, with $1 extra for gas pipe.

MISCELLANEOUS MATERIALS—

Asphaltum:

Ventura and other California asphalts, $20 to $23 per ton at New York; Trinidad refined, $22 to $25 per ton; Venezuela asphalt, $25 to $60 per ton; Bermuda asphalt, $25 to $35.

Cement:

Rosendale or Natural, in wood, 95 cts. per bbl.; Portland domestic, in sacks, $1.20 to $1.30; in wood, $1.50 to $1.60; German Portland, $1.90 to $2.10.

Copper:

Lake, 25.37½ to 25.75 cts.; electrolytic, 25.12½ to 25.37½ cts.; casting, 24.62½ to 24.87½ cts.

Lead:

New York, spot, 6.20 to 6.30 cts.

Spelter:

New York, spot, 6.80 to 6.90 cts.

Tin:

New York, spot, 41.87½ to 42.07½ cts.

Tar:

New York, $5.85 to $6 per bbl.

Pitch:

New York, $3.20 per bbl.

LUMBER—

New York, wholesale prices:

Piling—Spruce, ordinary cargoes, 6 to 7 cts.; oak, 14-in. butt, 40 to 50 ft., 19 cts.; 50 to 55 ft., 22 cts.; 55 to 60 ft., 2[illegible] cts.; 60 ft. and up, 25 cts.; pine, 60 to 65 ft., $8.50; 65 to 70 ft., $9.50; 70 to 75 ft., $10.50; 80 ft. and up, $16.

Railroad ties—Yellow pine, 6 x 9 ins. x 8 ft., 67 to 69 cts.; 6 x 8 ins. x 8 ft., 62 to 64 cts.; 7 x 9 ins. x 8 ft., 75 to 77 cts.; 7 x 8 ins. x 8½ ft., 74 to 75 cts.; 7 x 9 ins. x 8½ ft., 79 to 80 cts.

INDUSTRIAL NOTES.

THE MINNEAPOLIS STEEL & MACHINERY CO. has moved its New Orleans office to Dallas, Tex.

THE I. A. GREEN CO., Pittsburg, Pa., has been appointed agents for the Linton Rolling Mill Co., manufacturers of light steel rails and spikes.

THE RIVERSIDE BRIDGE CO. reports a great increase of business and has recently received contracts for the structural work of several large projects.

THE C. H. SHARP CONTRACTING CO., Kansas City, Mo., announces that it will continue the business of the firm formerly known as the Lantry-Sharp Contracting Co.

THE INDEPENDENT PNEUMATIC TOOL CO. informs us that it just received a large order for Thor piston air drills and pneumatic hammers from the Wisconsin Engine Company, Corliss, Wisconsin.

THE WESTERN ELECTRIC CO., of Chicago, reports that it has equipped a large number of mines with its ventilating equipments, including fans driven by its electric motors. Ventilating outfits for this purpose are kept in stock, with fans of 42 ins. to 72 ins. diameter.

THE JACOBSON MACHINE MFG. CO., of Warren, Pa., has completed all arrangements with a new corporation organized in Rock Island, Ill., incorporated as the Rock Island Tool Co., providing for the complete transfer of the Jacobson Machine Mfg. Co. vise business to the Rock Island concern.

THE FRED. M. PRESCOTT STEAM PUMP CO., Milwaukee, in order to equal the increasing demand for its mine and waterworks pumping engines, is again making large extensions, which, when completed, will more than double the present capacity of its plant, newly built but four years ago, and thought at the time ample to satisfy all reasonable growth.

POWER SPECIALTY COMPANY, 111 Broadway, New York, has been awarded contract covering equipment of eight B. & W. boilers with Foster superheaters at the U. S. Naval Proving Grounds, Indian Head, Md. The Foster superheater is also to be installed in the central power plants of the Brooklyn and Charleston Navy Yards and the U. S. Soldiers' Home, Baltimore, in several thousand horse-power of B. & W., Atlas and Edge Moor boilers, respectively.

THE CYCLONE DRILL COMPANY, of Orrville, Ohio, recently shipped one of its combined core and hollow rod drilling outfits to Wm. Gelder & Co., of New York, for prospecting their property at Tonopah, Nevada, and a duplicate outfit to O. W. Dunlap, Carlsbad, New Mexico, where a large mineral property is to be developed. Mr. John F. Munn, who has for several years been associated with the Davis-Calyx Drill Co., also with the Cincinnati Core Drilling Co., is now connected with The Cyclone Drill Company.

THE ARTHUR KOPPEL COMPANY, Machesney Building, Pittsburg, has its new plant, at Koppel, Beaver County, Pa., ready for operation. The main buildings, which were erected under the supervision of Dodge & Day, consulting engineers, of Philadelphia, include erecting shop, car shop, switch shop, machine shop, blacksmith shop and power plant. Concrete and steel construction is used throughout. The plant will manufacture rails, portable track, switches and frogs, turntables, contractors' locomotives, steel and wooden dump cars, platform and charging cars.

TRADE PUBLICATIONS.

VALVES AND HYDRANTS.—Eddy Valve Co., Waterford, N. Y. Cloth; 8½ x 5½ ins.; pp. 286; illustrated.

A large amount of detailed information is given regarding a great variety of valves. Hydrants are also included.

ELECTRIC CONTROLLERS.—The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Leaflet; 5 x 8 ins.; pp. 2; illustrated.

The radial arm reversible controllers made by The Cutler-Hammer Co. for cranes and hoists are noted on this leaflet.

BRICK MACHINERY AND KILNS.—Illinois Supply & Construction Co., St. Louis, Mo. Paper; 6 x 9 ins.; illustrated.

The Grath press is shown in various designs for brick and roofing tile; also the Grath kilns of the ordinary and continuous types.

BRICK MACHINERY.—The Fernholtz Brick Machinery Co., St. Louis, Mo. Paper; 10 x 6½ ins.; pp. 38; illustrated.

Brick presses occupy the greater part of this pamphlet, but clay pulverizers and mixers, molds and brick-yard supplies are also included.

BRICK PRESS.—American Sand Lime Brick Co., Great Northern Building, Chicago. Paper; 9 x 11 ins.; pp. 24; illustrated.

The White brick press is described in this pamphlet, the principal parts of the mechanism being illustrated and described in detail, with the methods of operation.

LOCOMOTIVES.—American Locomotive Co., 11 Broadway, New York, N. Y. Paper; 9 x 6 ins.; pp. 54; illustrated.

This pamphlet relates to engines of the ten-wheel or 4-6-0 class weighing less than 150,000 lbs., for passenger and freight service. Views and dimensions are given of about 30 engines of this type, ranging from 91,500 lbs. to 149,000 lbs. Three of the engines are for Canada, New Zealand and South Africa; all the others are for American railways.

CEMENT-MAKING MACHINERY.—Power & Mining Machinery Co., Cudahy, Wis. Catalogue No. 7. 6 x 9 ins.; pp. 86; illustrated.

This company makes a complete line of machinery for the production of Portland cement by either the wet or dry process, which is very completely described in this catalogue.

STEEL HAND BOOK.—Cleveland City Forge & Iron Co., Cleveland, Ohio. Leather; 4¼ x 6¾ ins.; pp. 56; illustrated.

This is a manual containing the customary tables of information relating to manufactured round and square bars, turnbuckles and clevis nuts and other forgings made by this company. The material on turnbuckles and clevis nuts is especially novel and valuable.

ENGINES.—American Blower Co., Detroit, Mich. Catalogue No. 206. Paper; 7 x 8¾ ins.; pp. 60; illustrated.

The "A B C" vertical self-oiling steam engine is fully described in this catalogue. The principal dimensions, together with price, are given for the different styles of engines, which are made for both high and low steam pressure and for all classes of service.

COMPRESSED AIR IN THE COTTON INDUSTRIES. — Ingersoll-Rand Co., 11 Broadway, New York City. Paper; 6 x 9 ins.; pp. 11; illustrated.

This publication discusses the advantages and advisability of using compressed air in the cotton factory and other cotton industries. Attention is also called to the different pneumatic tools, which are especially well adapted for use in such mills.

COAL HANDLING MACHINERY.—The Jeffrey Manufacturing Co., Columbus, O. Two pamphlets. Bulletins "B" and "C." Pp. 12 and 15; illustrated.

These bulletins illustrate and describe the various plants which this company have installed for the handling of coal and ashes in large factories and power plants. A large variety of conditions are treated, no two installations being alike in scheme or execution.

ELECTRICAL MACHINERY.—Allis-Chalmers Co., Milwaukee, Wis. Two bulletins. Paper; 8 x 10½ ins.; pp. 36; illustrated.

In one of these bulletins, No. 1,040, polyphase induction motors are treated, and in the other, No. 1,045, rotary converters are given attention. In both cases, descriptions and illustrations of the various parts of the machines are included, leaving little to be assumed regarding their construction.

MILLING MACHINES.—The Garvin Machine Co., Spring and Varick Sts., New York City. Two circulars. Paper; 6 x 9 ins.; pp. 12; illustrated.

In these two publications, both of which are devoted to milling machines, the vertical spindle motor-driven types are given attention.

DRILLING MACHINERY.—The Crown Drilling Machine Co., Akron, Ohio. Catalogue C. Paper; 6¾ x 10 ins.; pp. 64; illustrated.

Well-drilling machinery, including drilling and fishing tools, jars, bits, spuds, etc., upright engines and boilers, are described in this publication.

INSULATORS.—The Locke Insulator Mfg. Co., Victor, N. Y. Catalogue No. 9. Paper; 6 x 9 ins.; pp. 58; illustrated.

Insulating appliances for electric power transmission are illustrated and described. These include insulating bands, braces, brackets, break-arms, bushings, porcelain insulators, glass insulators, pole tops and porcelain tubes.

EXCAVATING MACHINERY.—The Hayward Co., 97 Cedar St., New York City. Paper; 6 x 3½ ins.; pp. 23; illustrated.

This is an illustrated but not priced list of dredges, skid excavators, derrick fixtures, railroad excavators, steel traveling derricks, coal hauling machinery and orange-peel and clam-shell buckets, all made and sold by the Hayward Company.

MARINE ENGINES AND BOILERS.—The Marine Iron Works of Chicago, Clybourn and Southport Avenues, Chicago, Ill. Catalogue No. 17. Paper; 6 x 9 ins.; pp. 84; illustrated.

Triple expansion and compound engines, vertical tandem, single cylinder, double cylinder, and single and double cylinder engines are illustrated and described; also water-tube marine boilers, Clyde, Scotch water-back, locomotive fire-box, and submerged tube marine boilers.

TIN PLATES.—American Sheet & Tin Plate Co., Pittsburg, Pa. Paper; 7½ x 5 ins.; pp. 62; illustrated.

The manufacture of tin plates, or more definitely speaking, "Terne" plates, is illustrated and described in this booklet beginning with the ore and ending with the finished product as a roofing material. This publication has been prepared particularly for the architect, the builder, the roofer, and the property owner.

PYROMETERS. — Charles Engelhard, 41 Cortlandt St., New York City. Paper; 5¾ x 9 ins.; pp. 56; illustrated.

Heracus "Le Chatelier" pyrometers for measuring temperatures between zero and 1,600° C. or up to 2,920° F., are briefly described, and a number of testimonial letters are given from those who have purchased these instruments.

BRICK MACHINERY.—Chicago Brick Machinery Co., Great Northern Building, Chicago. Paper; 7½ x 9½ ins.; pp. 34; illustrated.

This describes the Berg and the White brick presses, dry pans and pulverizers, clay mixers, scrapers for clay pits, cars, trucks, hoists and kiln fittings. There is also the Elwood press, operated by hand.

ELECTRIC GENERATORS.—Crocker-Wheeler Co., Ampere, N. J. Bulletin No. 74. Paper; 7½ x 9¾ ins.; pp. 12; illustrated.

Engine type alternating-current generators as built by the Crocker-Wheeler Co. are attractively presented in this bulletin. A number of views are shown of plants where these generators are installed and some details relating to the design of the machines are given.

BLACKSMITH TOOLS.—Buffalo Forge Co., Buffalo, N. Y. Catalogue No. 77. Paper; 3½ x 6½ ins.; pp. 38; illustrated.

In addition to the usual line of blacksmith tools shown in this catalogue, several new machines and improvements are noted, among which are ball-bearing forges, a hand blower with the high-speed gear underneath the surface of an oil bath, and a direct-drive blower.

STEAM ENGINES AND BOILERS.—Atlas Engine Works, Indianapolis, Ind. Bulletin No. 134. Paper; 8 x 10½ ins.; pp. 24; illustrated.

This is a general bulletin of illustrations and specifications relating to engines and boilers of the Atlas type. The list of engines and boilers given is very complete, and the specifications relating to them cover all the principal details.

BELTING AND BELT CONVEYORS.—The Main Belting Co., 55 Market St., Chicago. Paper; 10 x 9 ins.; pp. 48; illustrated.

The Leviathan belting is shown as applied to engine and mill work, and also for conveyors. At a large gravel pit it is used to convey the gravel direct from the steam shovel to the screening plant, and for elevating purposes it is fitted with steel buckets.

ROCK CRUSHER.—Contractors' Supply & Equipment Co., Old Colony Building, Chicago, Ill. Paper; 6 x 6½ ins.; pp. 4; illustrated.

The Symons crusher is of the gyratory type, a specialty of which is the low height and small weight for large capacity, while the crusher head has a movement at the top equal to that of the bottom. A number of special claims are set forth in the pamphlet.

CRANES.—Whiting Foundry Equipment Co., Harvey, Ill. Paper; 6 x 9 ins.; pp. 8; illustrated.

Electric travelers and other cranes for railroad service form the subject of this circular. A number of installations of cranes and other equipments furnished various railways are illustrated, showing gantry cranes, transfer cranes, traveling cranes, transfer tables, pillar cranes, jib and bracket cranes, etc.

AIR AND GAS COMPRESSORS.—Ingersoll-Rand Co., 11 Broadway, New York City. Catalogue No. 36. Paper; 6 x 9 ins.; pp. 184; illustrated.

Brief descriptions are here given of nine classes of compressors. These are followed by tables of sizes, etc., and by illustrations of typical machines and representative plants. Other subjects discussed in this catalogue are "Air Receivers and Pressure Tanks," "Aftercoolers," "Air Reheaters," "Air Compressor Valves," and "Compressor Regulators."

BRIDGES, BUILDINGS AND MACHINERY. —Minneapolis Steel & Machinery Co., 29th St. and Minnehaha Ave., Minneapolis, Minn. Paper; 3¼ x 6 ins.; pp. 18; illustrated.

This little pamphlet consists mainly of statements of the varied classes of work manufactured. The first part includes bridges, structural steel buildings, grain elevators, water towers, etc.; the second part includes steam and gas engines, gas producers, and machinery and appliances for mill and other plants.

BLOWERS AND EXHAUSTERS.—The Green Fuel Economizer Co., Matteawan, N. Y. Catalogue 104. Paper; 6 x 9 ins.; pp. 96; illustrated.

Green's fans for all purposes are described. Tables giving principal dimensions of the different styles of fans are appended, together with engineering information and tables.

GOLD MILLING.—Allis-Chalmers Co., Milwaukee, Wis. Bulletin No. 1420. Paper; 8 x 10½ ins.; pp. 40; illustrated.

This bulletin supersedes No. 4,000 and describes gold milling in the Black Hills. The paper is by Prof. H. O. Hofman, of the Dakota School of Mines, and was taken from the annual report of the school.

Bulletin No. 1407 is a reprint and describes Bennett's pouring spoon, which eliminates splashing.

CLAM-SHELL AND ORANGE-PEEL BUCKETS.—The Kiesler Co., Chicago, Ill. Paper; 6 x 9 ins.; pp. 16; illustrated.

These buckets are intended for dredging and excavating, and also for the handling of such material as coal, sand, gravel, broken stone, etc. Their special features are said to render them exceptionally effective in taking a full load. The illustrations show the buckets in use for various purposes, and are accompanied by testimonials.

CLAY WORKING MACHINERY.—The C. W. Raymond Co., Dayton, O. Paper; 10½ x 7 ins.; pp. 145; illustrated.

Besides presses of various types for bricks, tile and hollow ware, there are a variety of other machines, including dry pans, cutting machines, roll crushers and disintegrators, pug mills, shaker screens, etc. There is also a variety of appliances in the way of conveyors, transfer cars with turntables, trucks, kiln fittings, pumps and filter presses, and engines and boilers. Several pages are devoted to brick drying plants, while others show numerous designs of ornamental brick than can be made in the company's presses.

TAPE REPAIRING OUTFITS.—J. S. Kelley, 1305 First Ave., Seattle, Wash. Paper; 3¼ x 6¼ ins.; pp. 8; illustrated.

The outfit described in this catalogue seems to give a rapid and permanent repair joint for steel tapes. The frequency and ease with which such tapes break makes it necessary for every engineer's office to be provided with some such device with which repairs can be made. The catalogue also describes a field splice for tapes which is a useful addition to a field party's outfit.

AIR AND GAS COMPRESSORS.—Ingersoll-Rand Co., 11 Broadway, New York City. Catalogue H 36; paper; 6 x 9 ins.; pp. 64; illustrated.

The Ingersoll-Sergeant Class "H" compressor is described. These compressors are duplex, steam-driven, automatic machines, ranging in size from 7½ to 204 HP. General dimensions, capacities, horse-power, etc., for each size of machine are given. The theory of air compression is also discussed and the advantages of the different designs of machines considered.

GOLD DREDGING MACHINERY.—The Risdon Iron Works, San Francisco. Catalogue No. 17, 6th Ed. Paper; 6¾ x 10 ins.; pp. 60; illustrated.

The increasing use of this dredging method of gold mining makes this pamphlet a very interesting one to all operators in this line of work. The catalogue contains a very complete description of the type of machine built by the company, together with detailed lists of the various kinds and parts of machinery used on such work. There is appended a useful cost data sheet.

ELECTRICAL MACHINERY. — Allis-Chalmers Co., Milwaukee, Wis. Two Bulletins. Paper; 8 x 10½ ins.; illustrated.

Bulletin No. 1038 is a reprint of a previous bulletin; contains 24 pages, and is devoted to alternating current generators. It consists principally of illustrations showing different installations of machines made by this company.

Bulletin No. 1044 is also a reprint of 24 pages, and describes the H. Ward Leonard system of multiple voltage control for variable speed electric motors. The advantages of this system are considered at some length, and diagrams showing the power required to operate a 30-in. engine lathe, by this system, given.

ELECTRIC SUPPLIES.—General Electric Co., Schenectady, N. Y. 10 bulletins. Paper; 8 x 10½ ins.; pp. 126; illustrated.

The instruments and apparatus treated of in these bulletins are as follows: Bulletin No. 4,469, "Pocket Instruments" for direct and alternating-current; bulletin No. 4,471, "Electric Heating and Cooking"; bulletin No. 4,472, "Mercury Arc Rectifiers"; bulletin No. 4,474, "GE-76 Railway Motor"; bulletin No. 4,476, "Type PP Dial Controllers"; bulletin No. 4.477, "Accessible Manhole Junction Boxes"; bulletin No. 4,478, "Parts of Type K Series-Parallel Controllers"; bulletin No. 4,479, "The Toledo & Chicago Interurban Single-Phase Railway"; bulletin No. 4,480, "Pipe Thawing Transformers"; bulletin No. 4,483, "Automatic Time Switches" for alternating and direct-current circuits.

SURVEYING INSTRUMENTS.—The Buff & Buff Manufacturing Co., Boston, Mass. Paper; 6 × 9 ins.; pp. 117; illustrated.

The principal addition to this year's issue of this catalogue is the much larger and improved Fteley and Stearns Current Motor which is the design of Mr. Arthur T. Saffard, of the Locks and Canals, Lowell, Mass. The large graduating engine employed in all especially precise instruments, is also described. The catalogue contains the usual descriptions and price-lists of transits, levels, level rods and other surveying and astronomical instruments.

ELECTRICAL APPARATUS.—General Electric Co., Schenectady, N. Y. Four Bulletins. Paper; 8 × 10½ ins.; illustrated.

Bulletin No. 4481 deals with signal relays for use in connection with signal apparatus.

Bulletin No. 4482 describes designs of switchboards for medium or small capacity central stations of 2,300 and 10,000 volts potential.

Bulletin No. 4484 describes motor-driven, direct-connected railway signals and notes their advantage over other types.

Bulletin No 4486 describes type C Q direct-connected motors. These machines are made in sizes of $^1/_{16}$ to 20-HP. for various speeds and for voltages of 115,230 and 550 volts. Line cuts and tables of dimensions are given. Circulars No. 5159 and 5160 supersede previous price lists of incandescent lamps, while price list No. 5161, of fan motors, supersedes No. 5144.

ELECTRICAL APPARATUS.—Fort Wayne Electric Works, Fort Wayne, Ind. Four Bulletins. Paper; 8 × 10½ ins.; illustrated.

Jan. 1, 1907, index to bulletins Nos. 1001 to 1089 supersedes index of Jan. 25, 1905.

Bulletin No. 1087 is devoted to direct-current switchboard panels. These brands are made to meet various demands of service and for voltages of 125 and 250 volts. Wiring diagrams and diagrams showing location of instruments and switches are given.

Bulletin No. 1089 supersedes No. 1064 and describes alternating current switchboard panels for single-phase circuits. These panels are designed for voltages of 1,100 and 2,200 volts, and are made to meet varying requirements. Wiring and instrument diagrams are given.

Bulletin No. 1090 supersedes Bulletin No. 1070 and describes the "Wood" system of series alternating current arc lighting. Diagrams of connections, and switchboard and lightning arrester data are given.

Instruction book No. 3024 is devoted to series alternating current arc systems.

For other Proposal Advertisements see pages 55, 56, 57, 58, of Advertisements and Construction News page 102.

Municipal Civil Service Commission,
299 Broadway,
New York, March 11, 1907.

Public notice is hereby given that applications will be received from Monday, March 11, until 4 P. M., Monday, March 25, 1907, for the position of

ASSISTANT ENGINEER IN CHARGE OF SECTION, BOARD OF WATER SUPPLY.

The examination will be held on Thursday, April 4, 1907, at 10 A. M.

Appointments will be made for work outside of the City of New York, and the salary is $2,400 per annum and over.

The examination is open to all citizens of the United States.

For scope of examination and further information, apply to the Secretary.

FRANK A. SPENCER,
11-3t Secretary.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., March 12, 1907.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 4th day of April, 1907, and then opened, for constructing and installing steel file cases and the framing and mezzanine floors, etc., in connection therewith, at the U. S. Custom House, New York, N. Y., in accordance with the drawings and specifications, copies of which may be had at this office or at the office of the Architect, Cass Gilbert, 11 East 24th Street, New York, N. Y., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 11-2t

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DEPARTMENT OF THE INTERIOR, UNITED STATES GEOLOGICAL SURVEY, Reclamation Service, Washington, D. C., March 8, 1907.—Sealed proposals will be received at the office of the U. S. Reclamation Service, Glendive, Montana, until 2 o'clock p. m., April 25, 1907, for the construction of sixteen steel and twenty combination wood and steel highway bridges in connection with the Lower Yellowstone Project, North Dakota-Montana. Particulars may be obtained from the Chief Engineer, U. S. Reclamation Service, Washington, D. C.; H. N. Savage, Supervising Engineer, Huntley, Montana, or F. E. Weymouth, Project Engineer, Glendive, Montana. JAMES R. GARFIELD, Secretary. 11-4t

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U. S. ENGINEER OFFICE, Louisville, Ky., March 8, 1907.—Sealed proposals for steel or wrought iron trestles, etc., for Boulé dam, will be received here until 12, noon, standard central time, April 8, 1907, and then publicly opened. Information on application. H. BURGESS, Capt., Engrs. 11-4t

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SEWER PIPE, CASTINGS, BRICK, CURBSTONE AND FLAGGING, LEAD AND LEAD PIPE, GATES, VALVES AND HYDRANTS.

Melrose, Mass.

Sealed proposals for furnishing the City of Melrose, Public Works Department, with various kinds of stock, will be received by the Engineer and Superintendent of Public Works of said City, at his office, City Hall Building, Melrose, Mass., until twelve (12) o'clock noon, Tuesday, March 26, 1907, at which time and place all persons competing are invited to be present.

The proposals will then be opened and read, and no proposals will be received on any particular article of stock after the aforesaid time and date, except upon the rejection of all the proposals then presented on that particular article.

The estimated quantities of stock required are:

Sewer Pipe:
1,000 ft. 6" pipe.
1,500 ft. 8" pipe.
500 ft. 12" pipe.
1,600 ft. 18" pipe.
100 pcs. 6" × 5" Ys.
100 8" slants.
50 pcs. 18" × 8" Ys.
assorted bends.

Castings:
30 manhole frames and covers.
20 catch-basin traps.
20 catch-basin covers.

Brick:
85,000 sewer brick.
25,000 sidewalk brick.

Curbstone and Flagging:
(No estimate of quantities.)

Lead and Lead Pipe:
14,000 lbs. pig lead.
1,000 lbs. wiping solder.
10,000 lbs. ¾-inch lead pipe, 3 lbs. per ft.

Gates, Valves and Hydrants:
24—6-inch bell end water gates tested to 300 pounds.
4—14-inch bell end water gates tested to 300 pounds.
14—full 6-inch hydrants, 1 steamer and 2 hose, with frost jackets.

The above quantities are approximate only, and the said Engineer and Superintendent expressly reserves the right to increase or diminish them as he may deem advisable.

Bids on "sewer pipe," "castings," "brick," and "curbstone and flagging," must be on the form furnished by the Public Works Department, which can be obtained on application.

Each proposal must be accompanied by a certified check for fifty (50) dollars, payable to the City of Melrose, which check will be returned to the bidder within three days after the contract is awarded, except the same is forfeited on the part of the bidder by a failure to enter into a contract to deliver the goods on which bid was made.

The said Engineer and Superintendent reserves the right to reject any or all proposals, should he deem it for the best interests of the City of Melrose so to do.

GEORGE O. W. SERVIS,
Engr. & Supt. Public Works.
Melrose, Mass., March 12, 1907. 11-1t

CONCRETE SEPTIC TANKS.

Ithaca, N. Y.

Sealed bids will be received by the Board of Sewer Commissioners of the City of Ithaca, N. Y., at their office in the City Hall, up to 8 P. M. of Thursday, April 4, 1907, for furnishing all materials and labor necessary to build complete the proposed reinforced concrete Septic Tanks to be installed in connection with the Ithaca Sewerage System. The work involves about 1,100 cu. yds. of concrete, with piping, valves, etc.

The Board of Sewer Commissioners reserves the right to reject any or all bids.

11-2t H. L. STEWART, Supt.

DEPARTMENT OF THE INTERIOR, U. S. Geological Survey, Reclamation Service, Washington, D. C., February 12, 1907.—Sealed proposals will be received at the office of the United States Reclamation Service, Portland, Oregon, until 2 o'clock p. m., April 15, 1907, for the excavation of the Keno Canal, near Klamath Falls, Klamath project, Oregon, California, involving about 80,000 cubic yards of earth and rock excavation. Plans, specifications and forms of proposal may be obtained by application to the Chief Engineer of the United States Reclamation Service, Washington, D. C., the Supervising Engineer, 307 Tilford Building, Portland, Oregon, or the Project Engineer, Klamath Falls, Oregon. 8-4t

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OFFICE OF THE COMMISSIONERS, D. C., Washington, D. C., March 2, 1907.—Sealed proposals will be received at this office until 12 o'clock, noon, Saturday, March 30, 1907, for paving various streets and avenues with sheet asphalt. Blank forms of proposal, specifications, and all necessary information may be obtained at Room 43, District Building. **H. B. F. MACFARLAND, HENRY L. WEST, JOHN BIDDLE, Commissioners, D. C. 10-2t**

PAVING.

Titusville, Pa.

Sealed bids or proposals will be received by the City of Titusville, Pa., at the City Hall, on the evening of March 25th, 1907, at the opening of the session of the Common Councils, for regulating, grading, paving and curbing Brook Street from the east line of Franklin Street to the west line of Kerr Street, at which time and place the bids will be publicly opened and read by the City Clerk.

Bids will be asked for on Vitrified, Shale or Fire Clay Brick or Block only.

The approximate estimate of the work to be done will be as follows:

3,460 cubic yards of excavation.
4,575 square yards of pavement complete.
3,500 lineal feet of curbing.
125 lineal feet of circular curbing.
5 O'Brien Receivers.

The Councils reserve the right to reject any or all bids.

All bids must be made upon regular formal bidding sheets.

Each bid or proposal must be accompanied by an UNCONDITIONAL CERTIFIED CHECK, equal in amount to five (5) per cent. of the total amount of the bid, and payable to J. J. McCrum, City Treasurer, of the City of Titusville, Pa., which will be subject to forfeiture on the part of the contractor, in case of failure on the part of the contractor to enter into a written contract with the approved sureties if called upon to do so.

The City reserves the right to pay the whole or any part of the cost of the property owner's portion of this improvement in Improvement Bonds bearing 4 per cent. interest, to be accepted and taken by the contractor at par in payment of any of the amounts due him for any or all of the work done or materials furnished in this part of the improvement. The City's portion will be paid in cash.

W. M. DAME, City Clerk.

Plans may be examined and specifications and bidding sheets obtained at the office of H. A. HOLSTEIN, City Engineer, City Hall, Titusville, Pa. 11-2t

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WATER-WORKS.

Alma Center, Wis.

Sealed proposals will be received by J. T. Duxbury, Village Clerk, Alma Center, Wis., until 7.30 P. M., March 29, 1907, for the furnishing of materials and labor for the construction of a water-works plant, consisting of the following items: 93 tons of 4, 6 and 8" cast-iron pipe, 4,870 pounds of special castings, 13 4, 6 and 8" valves, 12 hydrants, laying 5,835 feet of cast-iron pipe, furnishing and erecting a 30,000-gallon steel tank upon a 30-foot masonry tower, furnishing a 16-HP gasoline engine and a 200-gallon triplex pump, the drilling of an 8-inch well 400 feet deep and the construction of a brick power-house.

Certified check 10% of the amount of the bid.

The right is reserved to reject any or all bids.

The work will be let in the parts, as given above.

W. G. KIRCHOFFER,
Engineer.
J. T. DUXBURY,
Village Clerk. 11-1t

SEWER MAINS.

Westerleigh, Staten Island.

Bids are asked until April 1st, 1907, for laying about 3,500 feet of sewer mains in streets in Westerleigh, Staten Island. Plans and profile can be seen at office of National Prohibition Park Co., Westerleigh, S. I. Privilege reserved to reject any or all bids.

NATIONAL PROHIBITION PARK CO.,
Westerleigh, West New Brighton,
Staten Island, N. Y. 11-1t

FORT HANCOCK, N. J., March 14, 1907.—Sealed proposals for construction, plumbing and wiring of 1 Ordnance Store-house, brick, 1 double set Civilian Employee's quarters, frame, and 1 Picket Guard house, brick, at this post, will be received until 12 o'clock M., April 13, 1907. Information furnished on application. U. S. reserves right to reject any or all proposals. Proposals should be marked "Proposals for Construction," addressed WM. PATERSON, Lieut. and Q.-M. 11-4t

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OFFICE OF THE COMMISSIONERS, D. C., Washington, D. C., March 2, 1907.—Sealed proposals will be received at this office until 12 o'clock, noon, Saturday, March 23, 1907, for making repairs to asphalt pavements for periods ending June 30, 1909, and June 30, 1911. Blank forms of proposal and specifications may be obtained on application to Room 43, District Building. **H. B. F. MACFARLAND, HENRY L. WEST, JOHN BIDDLE, Commissioners, D. C. 10-2t**

COVERED SAND FILTERS, CAST IRON PIPE AND SPECIALS, GATES, MANHOLES.

Yonkers, N. Y.

Sealed proposals will be received by the Board of Water Commissioners, at its office in the City of Yonkers, N. Y., until [illegible] o'clock P. M., April 4th, for a water filtration plant, consisting of two covered masonry [illegible] filters and certain appurtenances.

Plans may be seen, and specifications, form of proposal, bond and contract obtained after March 15th, at this office, and at the office of Hazen & Whipple, Consulting Engineers, St. Paul Building, New York City.

The approximate quantity of work will be as follows:

40,000 cubic yards of excavation for filters.
2,300 cubic yards of excavation in trench, embankment and fill.
5,400 cubic yards of concrete.
1 regulator and laboratory building.
12-inch tile drain.
Split 10-inch tile drains.
Placing cast-iron pipe, castings and gates.
2,000 cubic yards of filter gravel.
7,500 cubic yards of filter sand.
1 sand washer and wrought iron piping.
Fixtures and fittings.

Each bid must be enclosed in a sealed envelope endorsed "Proposal for covered sand filters, etc.," addressed to the Board of Water Commissioners, and accompanied by the consent of two sureties or a Surety Company to become guarantors of the faithful performance of the work.

A certified check for $3,000 must accompany each bid.

Separate bids will also be received for the following materials to be used in the construction of the plant:

120 tons of cast-iron pipe and specials.
Gates, extension stems, etc.
Manhole castings, ventilators, etc.
Apparatus for indicating rate, etc.

The right is reserved to reject any or all bids.

JOHN J. DEVITT, President.
A. W. KINGSBURY, Clerk.
March 8, 1907. 11-1t

BRIDGES.

San Ardo and Chualar, Cal.

Notice is hereby given that sealed bids for the construction of two highway bridges across the Salinas River, one near San Ardo, and one near Chualar in Monterey County, California, according to the plans and specifications of Lou G. Hare, County Surveyor, now on file in the office of the County Clerk of Monterey County, State of California (plans and specifications may also be seen at the office of said surveyor, at his office in the County Court House in Salinas City, California), will be received by said Clerk for the Board of Supervisors of Monterey County, California, up to two o'clock P. M. of the 1st day of April, A. D., 1907.

The plans and specifications cover both combination and steel types of bridges for each of the said locations. Separate bids must be submitted for the construction of each of said bridges. Each bid must be accompanied by a check made payable to the Chairman of the Board of Supervisors of Monterey County, California, and certified by some responsible banking house in the sum of ten per cent. of the amount bid.

The said Board of Supervisors reserves the right to reject any and all bids.

Dated, February 6, 1907.

J. L. MANN,
Chairman of Board of Supervisors of Monterey County, California.
Attest: T. P. JOY,
(Seal.) Clerk of said Board.
11-2t

BRIDGE.

Reading, Pa.

Sealed proposals will be received at this office up to 10 a. m., Thursday, March 28th, 1907, for the building of a reinforced concrete Arch Bridge, 60 ft. clear span, to be known as Kissling's Bridge, across the North Kill Creek, between Jefferson and Penn Townships, on the road leading from Bernville to Rehrersburg.

Plans and specifications and necessary information may be secured on application to the County Commissioner's Office, Reading, Pa.

All bids must be accompanied by a certified check equal to 10 per cent. of the aggregate amount of the bid. The right is reserved to reject any or all bids.

H. F. LIVINGOOD,
11-1t County Controller.

IMPROVEMENTS TO WATER SUPPLY.

McKeesport, Pa.

Sealed proposals will be received by the City Controller of McKeesport, Pa., until April 16, 1907, at Two (2) P. M., Eastern time, and publicly opened immediately thereafter, for the construction of certain improvements to the Water Supply as follows:

A. The laying of certain 8-inch, 12-inch, 20-inch, 24-inch and 30-inch Mains, including a new intake line.

B. A mechanical filtration plant and building of 6,000,000 gallons daily capacity.

C. A water softening plant and building of 10,000,000 gallons daily capacity.

D. A Chemical Storage Building.

E. One (1) 400-HP. Boiler.

F. Two (2) 7,000,000 low lift Centrifugal pumping Engines, Five (5) smaller pumps, Two (2) Water Meters.

G. Elevator.

Bids shall be received in whole or in part for the work contemplated. Certified checks made payable to the Treasurer of the City of McKeesport will accompany each proposal as follows:

Section A—$500.00.
Section B—$3,000.00.
Section C—$4,000.00.
Section D—$500.00.
Section E—$1,000.00.
Section F—$500.00.
Section G—$250.00.

Specifications and plans can be seen on and after March 18, 1907, at the office of T. H. Verner, Superintendent of the Water-Works, McKeesport, Pa., and at the office of the Engineer, Alexander Potter, 143 Liberty St., New York City.

Bidders desiring copies of the Filtration and Softening Plants can secure them on payment of $15.00 for the Filtration and $25.00 for the softening plant plans. Complete specifications for $2.00 per copy.

The right is retained to reject any and all bids or to accept that one which in the opinion of the Commission is for the best interest of the City.

In canvassing bids on this work, the Board of Water and Lighting Commissioners will take into consideration the time in which the contractor agrees to complete the various sections of the work on which he presents proposal.

By order of the Board of Water and Lighting Commissioners.

C. E. SOLES, Controller.
GEORGE B. HERWICK, Chairman;
WILLIAM EVANS,
J. B. AYRES.
Board of Water and Lighting Commissioners.
ALEXANDER POTTER, Chief Engineer;
D. S. TOBIN, Secretary. 11-1t

BRIDGE.

Paterson, N. J.

Sealed proposals will be received by the Board of Chosen Freeholders of the County of Passaic, N. J., on Wednesday, March 27th, 1907, at 2 o'clock p. m., at the office of the Clerk, at the Court House, Paterson, N. J., for

Building a Steel Bridge, etc., across the Passaic River at Straight St., Paterson, N. J.

Plans may be seen and specifications and forms of proposals obtained at the office of the County Engineer, at said Court House. Bids must be made upon the forms attached to the specifications.

A certified check in the sum of ten per cent. of the amount of bid, payable to the order of John L. Conklin, County Collector, to become forfeited to said Board of Chosen Freeholders of the County of Passaic in case the bidder shall not enter into contract if awarded, must accompany bid in each case.

The work of construction and erection of the bridge and foundations, etc., must be completed on December 1st next.

Bids to be addressed to the Committee on Straight Street Bridge and endorsed "Proposals for Building Straight Street Bridge."

The right to reject any or all bids is hereby reserved.

ABRAM G. HOPPER,
ANTON L. PETTERSEN,
FREDERIC BEGGS,
Committee.
GEORGE W. BOTBYL, Clerk.
Paterson, N. J. 11-2t

U. S. ENGINEER OFFICE, Jones Building, Detroit, Mich., February 16, 1907.—Sealed proposals for removing limestone bedrock from Item B, Lime Kiln Crossing, Detroit River, will be received at this office until 2 p. m., March 18, 1907, and then publicly opened. Information furnished on application. CHAS. E. L. B. DAVIS, Col., Engrs. 8-4t

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HIGH LEVEL SEWER.

Commonwealth of Massachusetts,
Metropolitan Sewerage Works,
Boston.

NOTICE TO CONTRACTORS.

Sealed proposals will be received at the office of the Metropolitan Water and Sewerage Board, 1 Ashburton Place, Boston, Mass., until 2.30 P. M. of Friday, April 5, 1907, for constructing in earth tunnel, part of Section 83 of the Extension of the High Level Sewer, South Metropolitan System, in Winchester Street, near Fuller Street, westerly through Winchester Street, beyond Thorndike Street, thence in Private Land to near Columbia Street, Brookline, in accordance with the forms of contract and specifications to be furnished by the Board. Some particulars are estimated to be as follows: Length, 800 feet; inside diameter of sewer, 69 inches by 72 inches; 50 cubic yards of Portland brick masonry, 1,200 cubic yards of concrete masonry in tunnel. The invert of the tunnel is from 28 feet to 54 feet below the street surfaces. Plans can be seen and specifications and forms of contract can be obtained at the above office. Each bid must be accompanied by a certified check for one thousand five hundred dollars ($1,500), payable to the Commonwealth of Massachusetts, and a bond in the sum of six thousand dollars ($6,000) will be required from the successful bidder. The Board reserves the right to reject any or all bids. HENRY H. SPRAGUE, HENRY P. WALCOTT, JAMES A. BAILEY, JR., Metropolitan Water and Sewerage Board. WILLIAM M. BROWN, Chief Engineer of Sewerage Works. WILLIAM N. DAVENPORT, Secretary. 11-1t

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U. S. ENGINEER OFFICE, 415, Custom-House, Cincinnati, O., March 14, 1907.—Sealed proposals for constructing crib work and riprap protection, at Lock No. 1, Big Sandy River, Catlettsburg, Ky., will be received here until 2 P. M., standard time, April 5, 1907, and then publicly opened. Information furnished on application here. J. G. WARREN, Maj., Engrs. 11-3t

Situations Wanted

Mechanical and Electrical Engineers.

ELECTRICAL ENGINEER, graduate, desires responsible position where rapid advancement is obtainable for the showing. Position with electric railway or transmission company preferred. Have first-class structural experience, which may be valuable to some company. Business and executive abilities. Now in charge of drafting room. Detail experience and references furnished on application. Address "W. B. 10," Engineering News, New York. 10-2t

MECHANICAL ENGINEER (40), with technical education and practical experience in various branches, desires responsible position. Address "O. B. 11," Engineering News, New York. 11-2t

MECHANICAL ENGINEER, technical graduate, desires position of responsibility with consulting or contracting engineers in general power equipment, heating and ventilation. Thoroughly competent in designing, estimating and managing work in this line. Change desired April 1st. Address "P. B. 11," Engineering News, New York. 11-3t

Civil Engineers.

CIVIL ENGINEER, Yale graduate, eight years experience (four as contractor's engineer and assistant superintendent) in foundations, complicated concrete work, masonry, earth work, timber, track-laying, steel erection, etc., for general construction, including railroads, bridges, large buildings, locks and dams, also familiar with cost keeping, purchasing, and office management, wishes change. Address "B. A. 5," Engineering News, New York. 11-12t

POSITION as resident engineer on heavy railway construction or assistant superintendent for reliable firm of general contractors. Nine years' experience on location, construction, concrete and dock work. At present in charge of 26 miles of railway location and construction. At liberty March 31st. Address "O. 11," Engineering News, New York. 11-4t

CIVIL ENGINEER, nine years experience, desires position, permanent if satisfactory, as engineer or constructing superintendent on concrete, masonry or steel work. Speaks English and German. Address "D. 11," Engineering News, New York. 11-2t

CIVIL ENGINEER, Post Graduate, Mass. Institute of Technology, desires position. Four years experience in heavy railroad construction work. Two years assistant engineer on the Boston Transit Commission, and at present employed as engineer in charge of construction on high-speed interurban electric railroad, consisting of heavy reinforced concrete work and steel viaduct. Best references furnished. Open for engagement April 1st. Address "P. C. 11," Engineering News, New York. 11-1t

GRADUATE CIVIL ENGINEER desires position. Experience in all classes of railway maintenance and construction, track elevation and yard design; also municipal engineering, and with hydro-electrical power plants. Address "G. 11," Engineering News, New York. 11-4t

CIVIL ENGINEER, technical graduate, Assoc. Member Am. Soc. of Civil Engineers. Has successfully held positions of designing and division engineer on railroad, and principal assistant on interurban traction lines. At liberty April 1st. Address "X. B. 11," Engineering News, New York. 11-1t

TECHNICAL GRADUATE, with 3 years experience in railroad location and construction work, desires position as resident engineer or instrumentman. South or Southwest preferred. Address "C. B. 11," Engineering News, New York. 11-1t

GRADUATE CIVIL ENGINEER, 28, with 5½ years experience in structural steel, tunnel construction, yard layout, etc., desires change. At present employed as assistant engineer ($150) with prominent railroad company. Field work preferred. Address "D. B. 11," Engineering News, New York. 11-3t

CIVIL ENGINEER, 10 years experience in railroad construction, now have charge of five 70-ton steam shovels, heavy construction, full charge classification and estimates. Would go with some contractor as manager or civil engineer. Age 40. Address "E. B. 11," Engineering News, New York. 11-1t

ENGINEER, experienced in designing and construction of special track-work, frogs, switches, etc., soon open for engagement. Familiar with street, steam and elevated construction; competent on estimating or any branch of the work. Best references. Address "TRACK," 1636 Monadnock, Chicago. 10-2t

GRADUATE ENGINEER, 28, five years' field and office experience in railroad location, construction and maintenance of way, desires change. Railroad work or general engineering. East preferred. Least salary $110.00. Address "S. B. 10," Engineering News, New York. 10-3t

Bridge and Structural Engineers.

STRUCTURAL ENGINEER open for engagement East of Mississippi, May 1. Graduate Civil Engineer. Eight years' experience. Two, railroad field work. The past three years in executive position in charge of the design of large power stations and other structures for street railway and lighting companies. Address "K. B. 11," Engineering News, New York. 11-4t

ENGINEER OF BRIDGES and buildings on large railroad system wants to change. Address "I. A. 11," Engineering News, New York. 11-1t

STRUCTURAL STEEL CONTRACTING ENGINEER desires to make a change in near future. Nine years with well known company. Good business and executive abilities; technical education; careful designer, estimator, and salesman; familiar with all kinds of structural steel, plate and foundry work; experienced in office management, costs, and in handling men. Prefer position as sales agent or assistant to general manager. Good references. Address "C. A. 11," Engineering News, New York. 11-4t

STRUCTURAL ENGINEER wishes to correspond with steel concern to do estimating on work in New York and vicinity, on small commission. Address "W. A. 11," Engineering News, New York. 11-3t

STRUCTURAL ENGINEER AND SUPERINTENDENT wishes position with prominent architect or engineer as superintendent of construction. Am graduate civil engineer (33), now employed as superintendent of construction U. S. Public Buildings. Salary wanted $2,400. Address "P. 11," Engineering News, New York. 11-4t

Draftsmen.

FIRST-CLASS DRAFTSMAN, graduate, several years experience surveys, all kinds of maps and topographical work; 4 years on street railways; 2 years chief railroad draftsman; quick worker, neat letterer; desires engagement immediately. Can use instruments. Fine testimonials. A1 references. $125 least considered. Address "R. A. 11," Engineering News, New York. 11-1t

DRAFTSMAN, accustomed to computing and checking on machine and steel framing construction, seeks employment. N. E. T., 359 West 15th St., New York. 11-1t

Surveyors.

POSITION WANTED by embryo engineer, preferably with contractor, as instrumentman, rodman, or general assistant. Two years college education. Some experience in handinig men. Address "F. B. 11," Engineering News, New York. 11-1t

YOUNG MAN, 23, desires position as assistant to surveyor. Good technical education and draftsman; also, fully understands trigonometry and geometry, and had slight experience in surveying. Address "H. B. 11," Engineering News, New York. 11-2t

TRANSITMAN wants position. 1½ years experience on construction and half year maintenance of way work. Address "M. B. 11," Engineering News, New York. 11-1t

LAND OWNERS—Are your property interest large enough to warrant the permanent employment of an engineer and draftsman with special training relative to making surveys, plans, etc., and taking charge of this department? If so, I solicit your correspondence. References A1. Location East. Address "Z. B. 11," Engineering News, New York. 11-1t

YOUNG MAN desires change. 4½ years experience transitman and draftsman on land and railroad work. Report at once. West or South preferred. Location Pennsylvania. Address "B. B. 11," Engineering News, New York. 11-4t

RODMAN (19) wishes position. Has three years experience in different branches of field work. References. BOX NO. 104, Tenafly, N. J. 11-1t

LEVEL RODMAN or Chainman; several months' mountain experience; not afraid of work; will go anywhere. Reference, last employer. Address "P. A. 9," Engineering News, New York. 9-3t

YOUNG MAN, 23, desires position with surveyors; good technical educatien and good draftsman; also had slight experience in level, transit, compass chain and plane table surveys. Address "D. B. 9," Engineering News, New York. 9-2t

YOUNG MAN (23) two (2) years experience at railroad and mining surveying, and one (1) year at rock tunnels, desires change. Good at figures, fair draftsman and familiar with practical side of rock tunneling. Address "H. A. 11," Engineering News, New York. 11-4t

YOUNG MAN of technical education, having 2 years practical experience as chainman, rodman, computer, can run transit, fair draftsman, desires position. Address "P. A. 11," Engineering News, New York. 11-1t

YOUNG MAN, five years experience surveying and railroad construction work, desires position. Any climate, warm preferred. Address "X. 11," Engineering News, New York. 11-1t

Superintendents, Misc., etc.

WANTED—Position by Italian foreman with some good contractor or company. Can furnish laborers. Have best of references. Come on short notice. Address TONEY CARDAMONE, 708 Wylie Ave., Pittsburg, Pa. 9-7t

TIMEKEEPER, pay-roll and cost clerk. Position wanted by young man; five years' experience. Address "F. B. 9," Engineering News, New York. 9-2t

GRADUATE ENGINEER, 13 years experience, wants position on large waterworks or hydraulic power plant construction. Address "B. A. 10," Engineering News, New York. 10-3t

SUPERINTENDENT or general foreman accustomed to heavy work in bridge erection and foundationo, dams, railroad construction, dry dock and breakwater work. At present employed. Desires change. Address "S. A. 2," Engineering News, New York. 11-2t

CONTRACTOR'S ENGINEER, experienced on water-works, sewers, tunnels, and general construction. Good executive and business ability. Accustomed to both office and outside work, taking full charge of contracts. Valuable acquaintance New York and vicinity. Technical graduate. Address "E. B. 9," Engineering News, New York. 11-1t

CONSTRUCTOR OF MASONRY. Active, energetic man of 40 desires position as superintendent or foreman. Extensive experience, thorough knowledge of handling men and of drawings. Unexcelled references. Address "R. B. 11," Engineering News, New York. 11-2t

ENGINEER (36), extensive experience in heating and ventilating, special training in design and installation of power plants for industrial equipment, desires to effect a change. Manufacturers agency considered. Address "S. B. 11," Engineering News, New York. 11-1t

A TECHNICAL STUDENT, 4th year Cooper Union, desires position in engineer's office Salary moderate. New York City preferred. Address "W. B. 11," Engineering News, New York. 11-1t

ASSOC. M. AM. SOC. C. E., 31 years, wants position or partnership. Expert, designing and executing high-class concrete construction, steel bridges and skeleton work. Versatile, well qualified, good address. Address "A. B. 11," Engineering News, New York. 11-2t

WANTED—Position as manufacturer's agent in Pittsburg district in charge of sales, erection, etc. At present engaged in an engineering and official capacity with a large manufacturing company. Fifteen years experience in steam and gas engine, locomotive and air compressor work. Well known among manufacturers, engineers and purchasing agents. Able man as engineer and executive. Address "G. B. 11," Engineering News, New York. 11-1t

ARCHITECTURAL ENGINEER on steel construction, reinforced concrete and foundations, is open for employment. Address "K. A. 11," Engineering News, New York. 11-1t

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WOULD the combination of engineering and legal experience be of value to you? Ten years practical engineering work in designing, estimating and shop management. Graduate LL. B., with practice in corporation law. At present in charge of engineering and estimating departments of company building structural steel work and heavy machinery. Address "Z. A. 11," Engineering News, New York. 11-1t

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HIGH-GRADE position in selling or executive organization of bridge company or any branch of the steel or contracting business. Graduate engineer, member of the American Society of Civil Engineers, fifteen years experience in structural steel and reinforced concrete work. Last three years chief engineer and manager of large structural steel works. Address "A. A. 11," Engineering News, New York. 11-2t

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YOUNG ENGINEER, 26, with 3 years practical experience superintending concrete and stone construction for contractor, desires change to position offering permanency of location and opportunity for advancement. Is sober, industrious and a hustler. Is accustomed to meeting and handling men. Can adapt himself to any position. Address "X. A. 11," Engineering News, New York. 11-1t

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WANTED—Young man with technical education and acquainted with office work connected with the contracting business, desires position with an engineering or contracting firm. Experienced in drafting and instrument work, assistant engineer on sewer construction, and has superintended extensive reinforced concrete operations. Address "S. A. 11," Engineering News, New York. 11-1t

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YOUNG ENGINEER desires position with contractor or land company. Seven years experience on sewer, road, drainage and building construction. Address "O. A. 11," Engineering News, New York. 11-1t

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TECHNICAL MAN (23), wants position with reinforced concrete company as superintendent or in office. 2 years experience. Can handle men, or make plans. Address "M. 11," Engineering News, New York. 11-1t

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AN EXPERIENCED constructing engineer and superintendent of reinforced concrete construction, technical graduate, desires position. Can furnish first-class references. Salary $135. Address "W. 11," Engineering News, New York. 11-2t

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POSITION as superintendent with engineer or contractor. 9 years experience at excavating, sewers, and surveying, designing, computing. Address "Z. 11," Engineering News, New York. 11-1t

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ARCHITECTURAL ENGINEER, capable of preparing complete set of plans for high-class buildings, specifications, plumbing, superintendence, desires responsible position with prominent firm. Would accept partial time proposition, or outside work. Address "E. 11," Engineering News, New York. 11-2t

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TECHNICAL GRADUATE (27), desires position requiring either field or office work. One years experience in each. Good draftsman and letterer, and capable of taking charge of field work. Now employed. Address "F. 11," Engineering News, New York. 11-1t

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ASSISTANT SUPERINTENDENT, at present employed, wishes change; field or shop. $125 salary. Technical graduate, 26 years old. W. E. C. 6405 Parnell Ave., Chicago. 11-3t

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TECHNICAL GRADUATE (31), Assoc. M. A. Soc. C. E., 9 years designing and constructing concrete, steel, hydraulic, and reinforced concrete structures. wants change. Address "L. 11," Engineering News, New York. 11-1t

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EXPERIENCED ENGINEER (38), now holding responsible office position with large construction company, desires an outdoor position as engineer in charge of construction in reinforced concrete and structural steel, cotton mills, factories, power plants, water-works, bridges and dams; eighteen years experience; first-class record; South preferred. Address "K. A. 6," Engineering News, New York. 10-4t

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AN EXPERIENCE derived from the management for several years of large operations of much detail, carried on at several points and requiring a knowledge of various classes of work and the possession of numerous abilities, is offered by a man of general and engineering education now successfully filling a position of trust and responsibility. Address "X. A. 9," Engineering News, New York. 9-2t

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SUPERINTENDENT, 15 years' experience on railroad construction, rock excavating, concrete work, etc., desires position. Best references. Salary to be determined by my merits. Address "H. B. 9." Engineering News, New York. 9-2t

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OFFICE ENGINEER AND ESTIMATOR on building construction, technical graduate, 10 years' experience on first-class work; present connection A1, but desire greater opportunity and more pay. Address "A. A. 9," Engineering News, New York. 9-3t

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TECHNICAL MAN, 35, good executive and mechanical ability, wants position assistant engineer, superintendent, or charge of construction. Has held similar positions. Best references. Address "Z. B. 10," Engineering News, New York. 10-2t

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SUPERINTENDENT OR GENERAL MANAGER (40), 15 years in full charge of general construction and reinforced concrete, also estimating department, adjusting and letting sub-contracts. Was general superintendent on United States Government and municipal construction carrying large corps engineers. At present employed. $2,500 and per cent. profits. At liberty 15 days notice. Address "X. B. 10," Engineering News, New York. 10-2t

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SUPERINTENDENT or foreman, graduate engineer, on foundation work, heavy shoring, sheet piling, caisson work, heavy concrete, etc. Estimator on such and all building construction. 3 years experience. Go anywhere. Address "O. 5," Engineering News, New York. 10-3t

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YOUNG MAN (28), single, technical education, residing Brooklyn, N. Y., 6 years successful record engineering and reinforced concrete building construction, desires position superintendent, inspector or foreman. Accustomed laying out own work and supervising same. At liberty March 15. Go anywhere. Address "K. A. 10," Engineering News, New York. 10-4t

Situations Open

WANTED—Draftsman accustomed to detailing ornamental iron work. Permanent position for right man. Address "K. 11," Engineering News, New York. 11-3t

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MECHANICAL ENGINEER.—A Portland cement company, located in Lehigh Valley district, which expects to build a new plant in about two years and use the present superintendent to build and operate new plant, wants engineer with experience (knowledge of cement machinery not necessary) to join present organization with view of becoming superintendent of present plant when new plant is started, provided he makes good. Give details of experience and state salary expected. Address "W. C. 11," Engineering News, New York. 11-2t

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TIMEKEEPER.—Wanted, bright, active young man as timekeeper for contractor; must be experienced; work out New York. Address "S. C. 11," Engineering News, New York. 11-1t

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STRUCTURAL DRAFTSMEN of experience wanted in Boston. Address PURDY & HENDERSON, Paddock Building, Boston, Mass. 11-1t

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DRAFTSMAN.—To compute latitudes and departures accurately, plat railroad notes and make neat maps with good lettering. Fifty dollars, hotel expenses and transportation from any point on Baltimore and Ohio Railroad. Send sample of work. BOX 602, Meyersdale, Pa. 11-1t

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WANTED—CONCRETE HUSTLING REPRESENTATIVES in Philadelphia, Boston, Springfield, Hartford, Providence, Albany, Syracuse, Rochester—to take the sales agency for concrete mixers and contractors' supplies. We have the best mixer on the market and want practical men as representatives, capable of handling this class of trade. Men who are acquainted with and are selling the larger contractors. Address "Z. C. 11," Engineering News, New York. 11-1t

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WANTED—A draftsman that has had experience in making maps for assessment of city property. Work will take from six months to one year. State salary expected. Address "X. C. 11," Engineering News, New York. 11-1t

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STRUCTURAL DRAFTSMAN who can design, lay out and prepare plans for the detailer, also supervise such detailing work. Apply by letter describing experience in detail during the last 5 years, giving the dates of change of employment. State salary expected. Address "M. C. 11," Engineering News, New York. 11-2t

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WANTED—High-grade estimators and designers for bridge and general structural work. S. L. JACOBSON, Room 28, Imperial Bank Building, Montreal, Que, Canada. 11-3t

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WANTED—Sub-foreman to take charge of testing small steam engines. Must be used to indicator work. Address "C. 11," Engineering News, New York. 11-1t

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WANTED—An engineer experienced in the inspection of bridge material, for the Pittsburg district, to act from time to time. State experience and rate per diem desired. Address "O. C. 11," Engineering News, New York. 11-1t

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ARCHITECTURAL DRAFTSMAN — Experienced in design, details and construction of railway buildings and structures. Give age, education, experience, references and samples of work. State present wages and amount wanted. Location Cleveland, Ohio. Address "L. B. 11," Engineering News, New York. 11-2t

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WANTED—Structural and bridge draftsman. CENTRAL STATES BRIDGE CO., Indianapolis, Ind. 11-3t

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WANTED—Draftsman in structural engineer's office in New York City; state experience and salary expected. Address "R. C. 11," Engineering News, New York. 11-1t

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WANTED—Experienced party to contract to mine 25 to 50 tons of gypsum per day, drift, no water, vein 12 to 18 ft. Rock taken at face by us. Or would employ right man to take charge. E. B. ALVORD & CO., Jamesville, N. Y. 11-2t

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WANTED—Two experienced bridge and structural draftsmen, prefer technical graduates. Positions permanent to right men. In reply state amount of experience, age, least salary expected to start with and how soon you could report for duty. THE BELLEFONTAINE BRIDGE & STEEL CO., Bellefontaine, Ohio. 11-3t

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WANTED — Experienced structural steel draftsman and checker for railroad and building work. State experience, salary wanted, and when available, and give references. THE BOSTON BRIDGE WORKS, Cambridge, Mass. 11-tf

Miscellaneous Wants

WANTED—Native German, preferably technical man, to give private German lessons in Philadelphia. Address "M. A. 11," Engineering News, New York. 11-1t

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STRUCTURAL DETAILING, estimating, designing taught evenings. Practical course. CIVIL ENGINEER, 541 Willoughby Ave., Brooklyn, N. Y. 11-1t

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STENOGRAPHER and TYPEWRITER, with knowledge of estimating and taking off quantities, desires to start with a good company where there is an opportunity for advancement. No objection to traveling. References furnished. WILLIAM R. GRAHAM, 417 4th St., S. E., Washington, D. C. 11-2t

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SUPERINTENDENT OF CONSTRUCTION AND FIELD ENGINEER wishes larger salary. Has had good experience on reinforced concrete, heavy concrete, trenching, railroad work, sewerage, construction and layout of factories, plants, etc. At present occupied superintending erection of large manufacturing plant in western part of Pennsylvania. Will go anywhere, but prefer east of the Mississippi. State terms when answering. Address "G. A. 11," Engineering News, New York. 11-1t

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WANTED

Second-Hand Repress and Combination Pug Mill and Brick Machine

Must be in A1 condition. Address with full particulars,

W. W. CUNNINGHAM, Manager,
501 Germania Bank Bldg.,
Pittsburg, Pa. 11-1t

WANTED

Machinery and Ironwork Complete for

One 2½ and One 4-yard Dipper Dredge

State weight, make, condition and price F. O. B. nearest shipping point. Address "I. B. 11," Engineering News, New York. 11-2t

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CAPITAL WANTED

CEMENT, LIME AND BRICK

Nearest Panama! 10,000 acres, 20 miles of gulf, railroad facilities, millions of tons of limestone, 98.01% carbonate of lime, inexhaustible clay supply. Water power to crush limestone, and run all machinery. Plenty fuel, indications of petroleum. Write for particulars.

E. B. BAILEY,
11-3t Monticello, Fla.

FOR SALE

IMPROVED "A" MARION

SPECIAL BARGAIN

Used six months. Guaranteed good as new.

IMMEDIATE DELIVERY

Sales Dept., Cincinnati Equipment Co.
CINCINNATI, OHIO

RAILS

250 tons 60-lb. Relayers at Williamsport, Pa.
1,000 tons of 60-lb. Relayers at Williamsport, Pa.
60 tons of 70-lb. Relayers at Williamsport, Pa.
1,300 tons of new 85-lb. A. S. C. E. at Pittsburg, Pa.
Also offer 25-lb., 30-lb., 35-lb. and 40-lb. Relayers.

IN STOCK

12's, 16's, 20's, 25's, 30's, 35's and 40's.
Will sell in large or small lots.
We make a specialty of cutting rails to length for special purposes.

L. A. GREEN COMPANY 11-1t
KEYSTONE BANK BUILDING, PITTSBURGH, PA.

FOR SALE

TWO TRAVELING CABLEWAYS

In first-class condition, now in use at Benvenue, Conn.

Towers, 75 feet; span, 600; aerial dump; capacity, 10 tons.

Made by Lidgerwood Mfg. Co.

BENVENUE GRANITE CO.
41 Park Row, New York City 11-1t